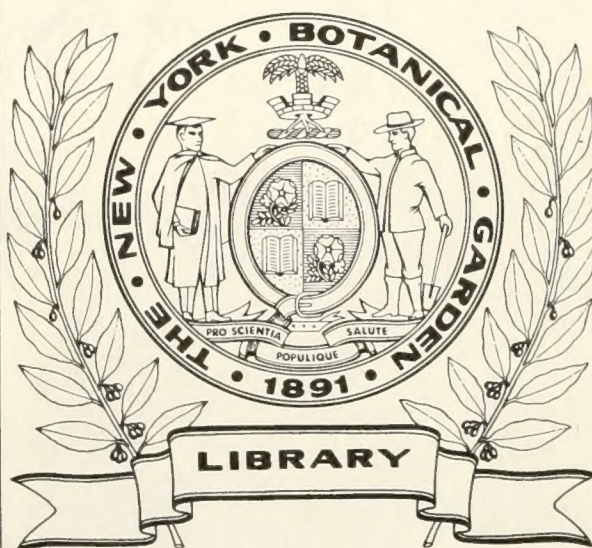


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vol. 30
1919



HORTICULTURE

Vol. XXX

JULY 5, 1919

No. 1

ROSES

OWN ROOT, 3-INCH, \$15.00 PER 100
\$140.00 PER 1,000

- 2000 CECILE BRUNNER
- 1200 HADLEY
- 1000 COLETTE MARTINET
- 4000 WHITE KILLARNEY
- 2000 DBL. WHITE KILLARNEY
- 2200 KILLARNEY BRILLIANT
- 3000 MRS. AARON WARD

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King, America, Halley, Schwaben, and other good varieties, well grown stock, long stems.

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We still have left about five thousand **ROSALIND** (Glorified *Ophelia*). This is much darker than the original *Ophelia*. Buds are bright coral, which changes to a clear pink when flowers are developed. One of our best sellers. Strong plants, 3½-in. pots, \$30.00 per 100.

We can supply, also, the following varieties in more or less limited quantities as long as unsold, strong plants from 3½-inch pots:

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SILVIA (Yellow <i>Ophelia</i>).....	30.00
FRANCIS SCOTT KEY, DOUBLE WHITE KILLARNEY, KILLARNEY BRILLIANT, HOOSIER BEAUTY, OPHE- LIA, SUNBURST, and MIGNON, or CECILE BRUNNER..	25.00

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NEPHROLEPIS elegantissima compacta and superbissima, 6 inch75
NEPHROLEPIS mucosa and Smithii, 5 inch.....	.75
NEPHROLEPIS elegantissima and Harrisii, 8 inch.....	2.00
NEPHROLEPIS elegantissima, 10 inch.....	4.00
NEPHROLEPIS nanus (Dwarf Boston), 8 inch.....	1.50

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FOR JULY AND AUGUST FLOWERING

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MME. E. MOUILLERE (white); HORTENSIS and OTAKSA (pink). Grown in butter tubs; about 18 to 24 flowers per plant	\$4.00
MME. E. MOUILLERE and OTAKSA. Extra large specimens grown in half-barrels; 4 to 4½ ft. spread, well budded, just beginning to show color.....	\$15.00 to \$25.00—according to size

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SOCIETY OF AMERICAN FLORISTS AND ORNAMENTAL HORTICULTURISTS

A caller, from Western Pennsylvania, at our Promotion Bureau a few days ago, while in conversation regarding our Publicity Campaign spoke of a florist in a neighboring town who put into practice a suggestion offered in this column recently to the effect that by questioning new customers as to what prompted them to patronize a particular establishment, an idea could be formed as to the influence exerted by our campaign. The florist was greatly pleased with the result. Almost all gave credit to our slogan, "Say it with Flowers," and the magazine advertising. This is in line with the experience of very many others, and there is not the slightest doubt in the minds of our enthusiastic contributors to the Campaign Fund that our publicity propaganda is having a similar effect in every community throughout the land.

Could the florists better serve themselves and their business than by contributing to the fund that is the bone and sinew of this movement? There is no longer the need for proof that our campaign is producing what all of us have been hoping for so long—increased consumption of flowers. The public everywhere has responded to the message "Say it with Flowers." Public men are using the slogan when opportunity occurs, and it is given publicity constantly in ways undreamed of by our committees. For all of which the trade is or should be grateful.

Did you, Mr. Reader, find your name in the subscription list published last week in your trade paper? If you did not, ask of yourself why. Was it through carelessness or negligence on your part? Was it because you do not believe in the work? Or, maybe, because you know so many are subscribing and, therefore, your contribution would not be missed? In other words, you have been willing to "let George do it." Roughly speaking the "George" of our subscription list is a composite of over 1600 florists who believe in our work, and with their money make possible the beneficial results we are getting. But to secure the maximum of possibilities our committees need the full amount of \$100,000 which, at the beginning of the year, they set out to raise—a small sum indeed to pay for a return to be valued at millions of dollars. Why not send in your contribution at once, thus becoming a "real fellow," and removing from your

conscience the weight which you must find depressing?

It is possible that some of our florists are awaiting a personal call from one or other of our representatives. While we are sure such a visit in the majority of cases would be successful, this is a vast country, and none should hide under such an expectation. Our very small corps of representatives is doing laudable work, but it is, necessarily, limited. A special representative of our Publicity Finance Committee, M. A. Vinson, entered recently the thriving town of Flint, Mich., and made a 100 per cent clean-up for the fund, the town not previously recording a subscription. The five florists there subscribed most cheerfully annual contributions for four years. They all appeared to be waiting for someone to come along to explain details of the campaign, and then would voluntarily say "Of course, we want to be in the list. It is a big movement, and we all want to be part of it." There are scores of other towns equally anxious to take part—but why wait for a personal representative, who may never arrive? The secretary will be delighted to furnish any needed information, and to announce contributions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

Jos. S. Merritt, Colgate, Md.	20.00
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Rose Queen (Genuine). Best light rose pink. Grown heavily by leading Pea growers. Oz. \$1.50, $\frac{1}{4}$ lb. \$6.00, lb. \$20.00.

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Rose Queen (Greenhouse Grown). Color beautiful shade of pink, produces extra long stems and usually four flowers per stem. One of the most popular varieties on the market. Strictly greenhouse seed. Oz. \$3.00, $\frac{1}{4}$ lb. \$10.00, lb. \$30.00.

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HORTICULTURE

Vol. XXX

JULY 5, 1919

No. 1

NURSERYMEN TAKE IMPORTANT ACTION

Perhaps the most important action by the American Association of Nurserymen in convention at Chicago last week was the decision to take over the Nurserymen's Service Bureau to be run under the direct supervision of the Association. It was voted to make an assessment of one-fourth of one per cent. on the gross sales of nursery stock.

A campaign of education will be undertaken on a wide scale in order to increase the interest in nursery stock and to bring about its more intelligent and systematic use.

Another important matter taken up was the practice sometimes followed of selling stock at trade prices to those not in the trade. A resolution strongly condemning this practice was adopted. It is not improbable that drastic measures will be taken if members are found continuing this practice.

The officers elected were J. Edward Moon, president; Lloyd C. Stark, vice-president; Chas. Sizemore, secretary and J. W. Hill, treasurer.

Retiring president, J. R. Mayhew, in his address said:

"A year ago your executive committee engaged the services of Chas. Sizemore as secretary-traffic manager. One of the duties of his office has been that of auditing freight and express bills of the members, and in the discussion of the possibilities of this feature of his work with the committee, I stated that if the membership would co-operate with this new office by filing with Mr. Sizemore their old freight and express bills, under the proposed plan of having 15 per cent. of the claims collected go into our treasury, 10 per cent. to the secretary, and 75 per cent. to the member owning the claim, the amount designated as the treasury's funds would largely pay the secretary's salary. How well my prediction has been verified is best told by the figures taken from the secretary's books on June 1.

"Total claims collected, \$7,533.08;

serving a total of 29 firms and distributed as follows: Funds returned to the members, \$5,654.31; funds returned to the treasury, \$1,130.90; Chas. Sizemore's commissions, \$753.87.

"In other words, on June 1 the secretary's salary for the year had been returned to the treasury with the exception of \$369.10, and only 29 firms out of a total of 400 had made use of this service. It can readily be imagined what the possibilities of this office would be if the entire membership would use the services offered, which, by the way, are cheaper by 10 per cent. than the same service offered by auditing firms generally. I think, gentlemen, I could not bring you better evidence of the possibilities of organization than is shown by this report.

"Fear was expressed quite generally a year ago that many of the larger firms would forfeit their membership rather than pay the advanced dues, and it is gratifying to be able to report that not only has this not been true, but a larger percentage of the members have paid their dues under the present schedule than on corresponding dates of recent years. The last information coming to my office on June 16 was that only 59 members had failed to report, and not one of these was among the large contributors. In view of the fact that quite a large percentage of the membership has in the past paid their dues during the convention, this report is most gratifying. The increase of membership fees and dues over the old schedule is approximately 100 per cent. as a whole, and altogether represents as fair and equitable a basis of taxation as could reasonably be hoped for. As I have already stated, I believe the present basis will provide adequate funds for taking care of the association's affairs in a creditable manner, and as far as I have been able to learn, this basis is, with very few exceptions satisfactory to the membership. It is not so much a matter, after all, of what a thing costs today as it is the service rendered, and this is peculiarly true of membership in this association. This membership can be made worth much more than our present schedule suggests, and if we do not get "cold feet" it will not be many years before

membership becomes so valuable that every eligible nurseryman in the entire country will be begging for admittance, without regard to the cost. My hope is that we may leave the schedule of dues where it is and that we may raise the standard otherwise until membership in the American Association of Nurserymen will represent all that is best and nothing that is bad in American horticulture.

The American Association of Nurserymen has a right to speak for the nurserymen of America, and it is the only organization in the country that has that right. I do not agree with my friend, the editor of the *American Nurseryman*, that this association "represents one-fifth of the nurserymen of this country." I am cognizant of the fact that there are a great many small nurserymen who are not members of the association, but I feel secure in the statement that any action of this body represents in a definite way the nursery interests of America, for the very obvious reason that this membership represents most probably 90 per cent. of the money invested in the business in America, and holds within its hands a large majority of the annual business in nursery products. This position is recognized by all, because no other body or individual makes any special effort to shape the destinies of the nursery business along national lines.

In 1917 your executive and legislative committees, anticipating the action of the Federal Horticultural Board in regard to plant exclusion, brought the whole matter before you in their report and asked that you direct them, and I hereby remind you that you directed your officers by adopting unanimously the following resolution: "Resolved that the executive committee recommends that the association do not approve of the exclusion of foreign grown nursery stock, but that the subject be referred to the incoming executive and legislative committees with power to act." On page 123 of the report of the proceedings at the Philadelphia convention, after a full discussion of the matter, this statement appears:

"The resolution recommended for adoption by the executive committee

SELLING AND PLANTING EVERGREENS

being before the convention, there being no further discussion, was unanimously adopted." Now, how does the propaganda disseminated at Washington by members of this body "that the executive committee, through its legislative committee and counsel, represents special and selfish interests at Washington rather than the majority of the nurserymen of this association," square with the last word you have spoken on this subject? You stand pledged, by unanimous vote, against plant exclusion, and if you have changed your mind it is entirely in order to rescind your former action. Your will in this or any other matter is law unto your executive committee, and until you delegate authority to someone else, let it be understood that no individual or corporation has authority to speak for this association. If you are now of a different mind to that expressed at Philadelphia two years ago, rescind your former action.

"In dealing with questions of legislation in general, I firmly believe we can make some improvement, and I shall make certain recommendations to the executive committee thereon which I hope may come before you in the form of recommendations. There is one other thing I want particularly to say, and that is that in the minds of quite a few of us there is a feeling that the interests of the nurserymen and our law making bodies are antagonistic, and this, in a large measure, is as untrue as it is unfair."

COMING MEETINGS.

Austin, Tex.—Texas State Florists' Ass'n, meeting and trade exhibition, July 9 and 10. Louis J. Tackett, Sec'y, Austin, Texas.

Toronto, Can.—Canadian Horticultural Association convention Aug. 12, 13, 14 and 15.

Detroit, Mich.—S. A. F. and O. H. Convention at Acadia Hall, Aug. 19, 20 and 21. Secretary, John Young, 1170 Broadway, N. Y. City.

Hartford, Conn.—Conn. Hort. Society, fall flower show, Sept. 9, 10 and 11. Sec'y Alfred Dixon, Wethersfield, Conn.

New York City.—The American Institute and the American Dahlia Society, exhibition of dahlias in the Engineering Building, 25-33 West 39th St., Sept. 23 to 25. William A. Eagleson, 322-324 West 23d St., Secretary.

Will secretaries please supply any omissions from this list and correct dates that have been altered:

At the nurserymen's convention in Chicago last week Chas. L. Seybold, superintendent of parks at Wilkes-barre, Pa., read an important paper on "The Growing and Preparation of Evergreens and Their Uses in Landscape Gardening."

He said in part:

"We know, of course, that all conifers prefer a well-drained, loamy soil that is moderately rich, but most of them prefer a light soil that is open and porous.

"If the more delicate and half hardy kinds cannot be given such soil, don't plant them. Too far north and in exposed positions we often find comparatively hardy kinds unable to winter through, and, on account of the growing season being shorter, the season's growth does not ripen sufficiently to pull them through.

"All evergreens that are not carefully burlapped and kept moist during the period of transportation generally arrive in a damaged condition, however, most of the damage is done by careless handling on the part of railroad employees. The trials and tribulations of the nurseries have been too severe during the past few years, but better times are coming, we hope.

"The general public seems to be afraid to order evergreens on account of the large percentage of losses. It is true there are some varieties, especially the pines, cedars, some spruces, cypress and others that are hard to transplant in larger sizes but this difficulty can be overcome by giving preference to such stock that has been root-pruned in the nurseries. I have seen car lots of pines killed by prolonged trips and careless railroad handling. Upon examination I found that the resinous turpentine-like sap had almost petrified in the wood which shrivelled up and choked them; they became a total loss.

"I am sure the sale of evergreens could be doubled by inaugurating an educational campaign in their behalf, for there is nothing growing in mother earth that can surpass them in beauty and stateliness. In speaking of plant value for high class ornamentation

they are in my opinion in a class to themselves.

"I cannot emphasize too strongly the necessity of root pruning evergreens, it saves the fine specimens and therefore it pays to do it.

"Every kind of tree, either evergreen or deciduous growing to a large size, when finally planted out at an age of four or five years, and having remained one or two years in the seed bed and two to three years in the nursery rows, grows better then, than at any other subsequent period.

"There are many kinds of smaller coniferous shrubs and plants that should be grown in greater quantities some of which have become extremely scarce, such as the upright *Taxus baccata erecta*, *T. fastigiata* or *Florance Court yew*, *T. fructu-lutea*, a very handsome golden fruited, *T. canadensis variegata* and the *Taxus baccata variegata*.

"There are many *Thuyas*, *Biota* and *Thuyopsis* of exceptional merit; *yuccas*, *Japan Holly* *Mahonias*, and *American grown holly* work in well to the front lines of coniferous borders. *Hollies* should be transplanted in early fall with a ball of earth; they will make fresh roots before winter and will start out good and strong in spring with new fibrous roots.

"As to the proper period of planting, I have, under certain conditions and very frequently advocated early fall planting; a semi-dormant period with excellent results, and where new growth has well ripened I have given early fall planting the preference.

"In case of extreme dryness a thorough watering or puddling should not be overlooked; this will start the plant at once into renewed root action and will become well established before winter sets in. When the ground is slightly frozen a mulch of litter, leaf mould, evergreen bough or straw wrappings will protect your fine specimens against dry winds and severe cold.

"Heavy irregular coniferous borders are often planted very dense for mutual protection, and with the object in view of thinning them out later, and for immediate effect; unless such work is done judiciously by a careful planter with the creative idea for permanent effect the job may turn out a failure; the various characteristics, sky-

"These planting sketches can be used over and over again with some starkness of winter may readily be slight alterations to suit certain conditions. They may show an artistic

intermingling of the pyramidal, pendulous, globe and prostrated forms, as well as the glaucous, bronze, golden fully studied before hand; for this reason experienced nurserymen and landscapers make it a point to keep on hand cross-section sketches of previous successful plantings.

line and general effect should be carefully and variegated varieties. All must be judiciously balanced with the much greater number of green tints.

"The smaller city or suburban home grounds may be ornamented in the same manner on a smaller scale by using the many kinds of dwarf and other coniferous shrubs and plants. It is always of interest to the nurseries to note the evergreens that thrive best in city yards under certain conditions such as soil and climate. *Buxus sempervirens* used in bordering beds is quite hardy when thoroughly established, but it must be protected from wind and sun for two winter seasons after planting. Evergreen Privets *Ligustrum lucidum* and *L. japonicum* thrive well under similar conditions, these two, however, are not as hardy as the Box and *Euonymus*. The Am. Holly (*Ilex opaca*) is the only true and reliable holly. When transplanting these they should be severely pruned, this is generally overlooked.

Rhododendron beds bordered with *Pieris alba floribunda*, known also as *Andromeda floribunda*, should be used and grown more extensively. This is a valuable plant for bordering purposes. Another variety is the *P. japonica*.

The hardy dwarf Azaleas with their deep green foliage and bright flowers, the *Kalmias* and others are good border plants for *rhododendron* and small evergreen beds.

The planting for wind breaks should be advocated more than it is, in colonial times it received more attention than it does now. *Picea alba*, *P. excelsa*, Norway Spruce, Hemlock should be used more for this purpose, even Cypress, Cedars and Siberian Arbor Vitae lend themselves for wind breaks, screens and hedges.

The planting of window and balcony boxes containing small coniferous plants should become more general. There has been, however, some complaint on the part of some, that many plants would have to be replaced several times a season to keep them looking presentable; then again the expense of too frequent re-planting at hotels and private homes has caused many to discard them altogether.

This should not be; the remedy is readily found in the proper selection. Small boxes containing dwarf conifers

and hardy ivys could be designed so as to enable the owner to remove them from the open to indoors; on the order of the Japanese style, thousands such boxes can be sold by enterprising firms, it will help to popularize coniferous plants.

Every nursery should have show grounds conveniently located near the main entrance exhibiting the different varieties of evergreens that are catalogued and grown in the nursery. No attempt need be made to show landscape effect, as straight rows containing good specimens are sufficient for convenient inspection by the customer. However larger nurseries with plenty of space may show samples of groups, beds on extensive irregular borders with sufficient lawn space to make a most attractive exhibit which will show off the specimens to better advantage, giving the customer an idea of how his borders will look when planted, group plantings for park and cemetery entrances, the screening of unsightly and objectionable places, the treatment of both small and extensive lawns showing at all times an open lawn effect. In this manner knowledge in tasty landscape gardening may be readily imparted to the prospective purchaser. Conspicuous labels with both common and botanical names will help familiarize the worker on the place as well as others with whom the nurseryman has to deal besides it will save much valuable time in going around making selections.

To make farmsteads more attractive is another feature that is receiving more attention. The busy farmer of course does not care for a formal garden and trimmed hedges, but he wants a plain and sensible ornamentation consisting of some larger growing trees and evergreens for shade and wind break, he may plant hedges as do not require any trimming, such as hemlock, Siberian and American Arbor Vitae, Japan Barberry, *Spiraea Van Houttei*, Mock Orange, Tartarian Honeysuckle, *Rosa Rugosa*, etc. Lilacs for hedges are also desirable, provided they are sprayed against the ever re-curring scale that affects this plant.

The temporary winter decoration and protection with evergreen branches and trees in the public square parks has been attempted by a few cities with great success. The public traversing such places by the thousands each day approves of it.

In such sections where there is plenty of such material close at hand, the eliminated and the beauty of a city square or park enhanced. Hemlock,

Pinus, Mountain Laurel and Norway Spruce may be used to cover bare spots of ground, also flower beds and borders. This may be a profitable thing to do in November when we are not otherwise busy.

The question of proper soil for evergreens may thus be answered: I find that a soil of good physical texture, which means a soft pliable and reasonably loose soil in which the roots may readily forage and which contains sufficient organic matter or humus is best. In preparing a border for a group or for lining out a block of evergreens, it is essential to plow or spade very deep, or as deep as possible. Cloggy, heavy soil should be thoroughly worked before plants are set.

We know, of course, that bacterial organisms exist in all soils to a greater or lesser degree. They will spring into active life and multiply tremendously. The conditions should be freedom from acidity in which injurious organisms cannot exist, an abundance of humus. The ideal soil is a rich sandy loam but not too strong in animal fertilizers nor in chemicals. Such a soil carries a higher temperature, is naturally well drained, moisture and warm air penetrates it more readily and enters deeper. Seeds will germinate quicker and become stronger, and cultivating becomes easier.

I wish to compliment this organization on its splendid work in disseminating knowledge in arboriculture, general horticulture and forestry. The great patriotic services rendered and the sacrifices made through the most trying times in its history cannot be over estimated.

Careful nomenclature has been adhered to by our nurserymen, the splendidly gotten up and instructive catalogues have done much to educate the public on selections and on practical lines.

In conclusion I wish to say that my aim has been to touch upon the cardinal points that are to be observed in the preparation, the use and selection of evergreens needed in the artistic development of our American parks and private grounds; however, I have slightly deviated somewhat by adding to my paper what I have deemed of vital interest and importance to our nursery interests and as a nucleus for profitable discussion by the many bright lights of the profession that are here assembled. I wish to thank your committee for inviting me to your meeting, and for the signal honor to have me prepare this paper for you.

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Fall lawn seeding

It is a point worth bearing in mind that nearly all the most important varieties of grasses for lawns, golf courses and park seeding are in short supply. That means that gardeners and other buyers will need to place their orders early if they are to do any seeding the coming fall. In recent years an increasing number of experts has come to realize the advantages of fall sowing. August and September are often among the best months of the year for lawn making, and as this kind of work was largely neglected during the war, it is probable that it will be taken up with renewed vigor this season.

Outlook for flowers

It is worthy of note that the conventions so far held this season have shown that all the horticultural interests of the country are coming back strong, now that the war is over. The demand for flowers seems to have been increased rather than diminished by war-time conditions. This has surprised some people, but the truth is that flowers proved to be one of the best antidotes of the war horror. Flowers brought dying soldiers back to life. They soothed the sufferings of the wounded and assuaged the grief of those in distress. Soldiers abroad learned the love of flowers which characterize the people of Europe. When they came back they gave more attention to the flowers of the homeland than ever before. All this has been reflected in the prosperity of flower growers and retail dealers. The demand for nursery stock has proved far greater than expected. It has been difficult for some time to buy plants of garden roses, except in a few varieties. Many plantmen have sold direct to the public instead of to the trade. There has been a tremendous call for gladioli and dahlias. Flower boxes are coming back into favor and even the big stores and business houses are resuming the custom. The one thing that is calling considerable agitation is the practice of department stores in selling cheap plants. This is a matter which will have to be taken up very seriously.

Fallacious Reasoning

"FOR A GREAT AMERICAN HORTICULTURE"

"A More Beautiful and a More Fruitful America Lies Just Ahead—The Public Looks to the Nurserymen of This Country to Produce It—Interest in American Propagation Already Awakening—Federal Aid Is Assured—Steam On—Two Bells—Throttle Open—For America First!"

The above is the bombastic heading of a four page pamphlet which last week came into my hands as doubtless it did to those of many others. The pamphlet I find is largely made up of "extracts" from recent issues of the American Nurseryman, Rochester, N. Y., which extracts with rare exceptions laud Quarantine No. 37. Glancing through it casually one gathers that this much discussed measure is the very thing the nurserymen of America have been praying for—that it will boom their business by excluding foreign competition—that it will keep out all plant pests and "should have been done before." Many of the "extracts" are signed but the most careful scrutiny fails to reveal the names of many of the leading nurserymen of the country. Maybe this is an oversight on the part of the compilers of the pamphlet! Substitution is the nostrum mostly recommended. It is to be "up to salesmanship of the trade to see that a demand is created for the changed product." The tastes and desires of the purchaser are not brought into consideration. If he can't find what he wants he is to be cajoled into buying something else. His money is to be secured come what may.

One man thinks that geraniums may take the place of azaleas; that pansies may take the place of bulbous stock. Evidently so long as the sales are good nothing else matters. A Minnesota firm thinks that thousands of lilacs will be handled by the American nurserymen. They admit having a good stock of French lilacs on hand—"some three or four thousand in fact, and in our retail trade these will last us quite a while, possibly, we think, until some modification of Quarantine No. 37 has been made so that we will be able to import them again from France. If not we will begin to propagate them—budding the different varieties." Obviously they are either optimistic of an early modification of Quarantine No. 37 or their sale of lilacs is not a brisk one.

After a careful reading and digestion of its statements I do not find this pamphlet convincing. Quite the contrary. I find its reasoning fallacious, selfish in spirit and quite opposed to the views of the many nurserymen I have talked with since my return to this country from the Orient some three months ago. If those responsible for this pamphlet imagine that they are going to stock American gardens with such material as that commonly seen in so many American nurseries they are much mistaken. Garden art in America is advancing and calls for the best of everything the world possesses and it will be satisfied with nothing less. Neither this pamphleteer, nor the Federal Horticultural Board, nor the American Nurseryman and its proteges are going to dictate what shall and what shall not be grown in American gardens. The common sense, knowledge and tastes of the proprietors of these gardens are going to settle this question. As Quarantine No. 37 now stands it is both invidious and ridiculous. All who have the real interest of American horticulture at heart should not rest until it is repealed and its place taken by a fair and constructive measure which will safeguard all interests.

E. H. WILSON.

NEWS AND COMMENT

AMERICAN SWEET PEA SOCIETY.

At the eleventh annual exhibition and convention of the American Sweet Pea Society in the American Museum of Natural History, New York City, on June 21 and 22, all the officers were re-elected, as follows: President, Geo. W. Kerr, Doylestown, Pa.; vice-president, Edwin Jenkins, Lenox, Mass.; secretary, William Gray, Newport, R. I.; treasurer, Wm. Sim, Cliftondale, Mass. Two new directors were elected, James Stuart, Mamaroneck, N. Y., and E. C. Vick, New York.

A memorial resolution on the death of Wm. J. Stewart, of Boston, was passed, and a copy ordered sent to the family of the deceased.

An invitation to hold the next exhibition and meeting in Boston was read and considered, and was finally referred to the executive committee for action.

ROCHESTER, N. Y.

After an illness of several weeks, during which time two severe operations were necessary, John Dunbar, assistant superintendent of parks, and one of the most widely known authorities on plants and shrubs in the country, returned to his duties with the park department on Saturday, June 28th. He is at present engaged in leading the attack of the park department on the Tussock moth which is now making its appearance, though not nearly as numerous as in former years. Mr. Dunbar stated this morning that while the pest was in the city, the cases were isolated and that the park department was examining all trees in the city and destroying all signs of the moth.

Business during the past week has been fairly good. Graduation of both high and public schools have helped to clear stock which is plentiful with the exception of White Rose and White Peas. There has been such a heavy demand for wedding bouquets that other flowers had to be substituted. Roses are plentiful in Ophelia, Sunburst Maryland, Wards, and some good American Beauties are on the market. Some good St. Joseph Lilies have arrived on the market and are in good demand. Carnations are of very poor quality. Lily of the Valley are scarce. Good Delphinium are seen. Some Peas are somewhat scarce, the outdoor ones were almost ruined by the heavy rain during the past week but which saved thousands of dollars worth of crops

and flowers. Good corn flowers, Calendulas, Gladioli, coreopsis, out door Snapdragon, Sweet William and Zinnias are among the garden flowers. Good ferns are reaching the market.

OBITUARY.

George Ladley.

George Ladley, for many years superintendent and grower for William Swayne, Kennett Square, Pa., passed away June 24th, aged 48 years. He was highly respected by all who knew him and leaves a fine record behind him. Mr. Swayne feels his loss keenly and almost feels like selling out the place now that his big man is gone.

NEWPORT FLOWER SHOW.

An excellent flower show was held in the Convention Hall at Newport, R. I., Wednesday of last week. It was primarily a Rose Show, but some very fine sweet peas were shown, in the following varieties; Hercules, pink; King Edward, red; Constance Hinton, white; Royal Purple; Helen Lewis, salmon pink; Florence Nightingale, heliotrope; King Manuel, maroon. There was also a good display of orchids and a creditable exhibit of hardy perennials and vegetables. Mr. A. J. Fish of New Bedford, Mass., repeated his Boston success with climbing roses. He was awarded a silver medal for his collection of 75 vases, also first prize for 24 vases, 3 sprays in each, all different named varieties. Some handsome hybrid teas were shown, the yellow varieties attracting special attention.

NEW ENGLAND.

Charles L. Howe, florist, of Dover, N. H., has sold his business to John Massingham. Mr. Massingham will continue the business along the same line successfully operated many years by Mr. Howe, whose little store has grown to be one of the largest, best known and most prosperous in New England. The same staff of reliable, efficient workmen will be retained by the new proprietor.

The Hartford, Conn., Florists' Club at a meeting at Harry Bond's restaurant last night decided to have the annual club outing this year at Lake Compounce, July 19. The committee is H. Miller, Paul Hubbard and Robert Marchant. Hartford and Cromwell will have a bowling match. Robert Cawte of Bloomfield, was elected a member.

Miss Laura Junior has entered the employ of Nicholas, the florist, at Springfield.

The engagement is announced of Miss Clara M. Shannon of Auburn, Me., to Herbert Edgar Seavey of Bangor. Mr. Seavey is a graduate of Bangor high school class of 1915, and is now associated with his father, G. S. Seavey, as gardeners and florists and is well known in both social and business circles.

One of the largest church weddings of the month of June in Worcester, Mass., was that of William L. Luby and Miss Anna T. Portle, daughter of Mr. and Mrs. Jeffrey T. Portle of 29 Shamrock Street, which took place in St. Ann's Church. The Rev. John B. Farrell performed the ceremony. Mr. Luby is a member of the firm of Estabrook & Luby, florists, 537 Main street, Worcester.

AMERICAN GLADIOLUS SOCIETY.

The tenth annual meeting and exhibition of the American Gladiolus Society will be held in the Arcadia Auditorium, Detroit, Mich., during the next convention of the Society of American Florists and Ornamental Horticulturists, August 19, 20 and 21. Complete information regarding the exhibition will be published in the premium list which will appear soon. It is hoped all growers may make their plans to attend this meeting.

A. C. BEAL, Secy.

THE BEST CLIMBING ROSES.

This is not the time for planting roses but now is the opportunity for making up your bit for next fall or spring planting. One of the most complete of the private collections of climbing—as well as other sections of the rose family—is that of Samuel S. Pennock at Lansdowne, Pa. He has thirty-five named varieties of climbers and has given them all close study. We cannot give his comments on each variety in our limited space but we have got his views as to the best ten out of the thirty-five; also the best five—for those who cannot find room for more than five. The varieties follow:

Mrs. M. H. Walsh, Dorothy Perkins, *Lady Gay, Elizabeth Zeigler, Climbing Killarney, Climbing Lady Ashtown, Yellow Rambler, **Dr. Van Fleet, Mary Lovett, Wichmans, Paul's Carmine Pillar, Alida Lovett, **Paul's Scarlet Climber, Moschall Alba, **Boss Lovett, *Hiawatha, **American Pillar, Aviator Merlot, Tausendschon, **Excelsa, Dark *Tausendschon, Climbing American Beauty, Alberic Barbier, Mrs. Night, White Dorothy Perkins, Philadelphia Rambler, Babette, Minnehaha, *Silver Moon, Purity, Paradise, Maud Marion Velschblau, Shower of Gold, Gardenia.

The double cross indicates the five and these added to the single cross makes the ten.
G. C. W.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

Maurice Fuld has departed from the beaten track in his little magazines, "Flower Lore" and "Vegetable Lore," each of which is gotten out once a month and contains no advertising. It is evident that Mr. Fuld personally writes practically all of the material. It would be impossible to mistake his peculiar style. Much which he says is probably of much interest to amateurs, but occasionally he is led astray. In the June number, for example, he quotes a subscriber as saying:

"I have a cure for rose bugs. I discovered that the chickens running in a garden where roses bloom entirely exterminate the bugs, even jumping for them when the roses were high. Now if you trim a rose bed according to directions in "Flower Lore" and let the chickens in where the roses are, you will soon get rid of the bugs. The plan would also save feeding the chickens beef scraps." In commenting upon this suggestion Mr. Fuld remarks: "If this should be found effective, every rose grower will hail with delight this discovery, and it would pay even if we have to borrow the neighbor's chickens to do it."

Probably the trouble with Mr. Fuld is that he is out of his element when talking about chickens. Every poultry grower who has had any experience in this line knows that when chickens feed heavily on rose bugs the result is usually fatal. A report which has just come from the experiment station at Storrs says that within twenty-four hours after a week-old chick has eaten fifteen or twenty rose bugs, death will result. More bugs will kill older chickens, and it is not until the birds are nine or ten weeks old that the rose bug diet will be found safe. It is claimed that death is due to a poison in the bodies of the rose bug, and not because their scaly legs scratch and irritate the chick's crop, as people sometimes suppose.

It is an interesting announcement in the English papers that a regular guide is to be employed at Kew gardens. This guide will escort visitors about the grounds, pointing out to them the features of special interest and answering questions. This is in line with the growing appreciation

shown by the public of plants and shrubs to be found in public gardens. Something of that kind is needed at the Arnold Arboretum, in Boston, and elsewhere throughout the country. Visitors, especially amateurs, are likely to miss much that is valuable and important if they are obliged to depend wholly upon labels. All too often these labels contain only the botanical names, which mean nothing to the layman. Where a guide is out of the question, a carefully arranged guide book, sold at a nominal price, would perhaps prove an acceptable substitute.

The new campanula Minna Gehring is now blooming in my garden. It is a very distinctive plant and profuse with its flowers. Its one fault is the habit which its blooms have of hiding their charm by hanging pendant. If they stood out straighter they would show off much better but they make a good display as it is. This campanula is a natural hybrid which was originally found in the garden of Dr. Gehring in Maine.

NEW YORK FLORISTS' SPECIAL.

The party which will take the New York Florists' special to Detroit, via Buffalo, with a side trip to Niagara Falls, and boat trip across Lake Erie to Detroit, for the Convention, Aug. 19-21, is assuming good proportions, and bids fair to be the largest delegation attending any of the conventions. The following have already made reservations:

President and Mrs. Kessler.
Mr. and Mrs. F. H. Traendly.
Mr. and Mrs. A. L. Miller.
Mr. and Mrs. John Canning.
Mr. and Mrs. Curt Thimm.
Mr. and Mrs. John Miesem.
Mr. and Mrs. R. Wittman.
Mr. and Mrs. C. H. Totty and Miss Totty.
Mr. and Mrs. A. M. Herr and Irving Herr.

Mr. and Mrs. J. A. Manda and friend.
Mr. and Mrs. Richard Vincent, Jr., and friend.

Messrs. John G. Esler, A. M. Henshaw, J. H. Fiesser, John Scheepers, Peter Gerlaid, C. W. Scott, Roman J. Irwin, P. W. Popp, A. T. DelaMare, (2) J. H. Pepper and Lord & Burnham Company (2).

Many others have expressed intentions to join the party, but it is highly important that early reservations of berths be made as the list must close ten days ahead of departure.



A New Campanula

THE GARDENERS' SECTION

CLEMATIS MONTANA RUBENS.

One of the most attractive of the numerous climbing plants sent from China by Mr. E. H. Wilson is the pink form of the old garden favorite, *Clematis Montana*. When first flowered in Europe some twelve or fourteen years ago it was at once recognized as an important and beautiful addition to the hardy garden and I venture to predict it will be very popular in this country when it can be obtained in quantity. During the latter part of May and the early half of June in the vicinity of New York one may see good specimens and when care is taken in selecting the position the masses of pink flowers produce a delightful effect. It is particularly well adapted for growing on columns supporting a structure or over a balustrade or where a light and graceful climber is required, and I think it is undoubtedly true that this *Clematis montana rubens* may be raised from seed and while the resultant plants will show considerable diversity of color, all will be desirable.

A. E. THATCHER.

PROVENCE ROSES.

A rose by any other name would smell as sweet, yet what a wealth of association there is to the names of flowers. The pink weigela and white syringa blossomed in my grandfather's garden. *Diervilla* was an unknown name and *Philadelphus* would have suggested the City of Brotherly Love, but I delighted in the fragrance of the syringa while tying up in the corner of my handkerchief the dark brown strawberry blossom, little thought I then of its being a *Calycanthus floridus*, but I enjoyed its fragrance while nibbling the aromatic leaves of the mint.

It was a pretty fancy of Mary Wilkins Freeman to write the story of the different flowers. If I were to characterize these crisp red roses I would liken them to a group of merry children in freshly starched dresses with laughing eyes and curly gold hair, for there is such a fresh brightness about them so different from the tea roses in their satiny lustre, while that big hybrid perpetual suggests a very Beau Brummel. Yet the stories which these

lovely red roses fold away among their petals are not all of happy childhood's day, for they are the flowers which the Huguenots, driven from their homes in France, took with them to England. Then the English colonists brought them here. Today they are found growing around the old deserted houses of Vermont and New Hampshire. In our gardens they are known as the Sunakee roses, their roots came from a cellar near that beautiful blue lake, life and thought had gone away but left the roses. Had some of them been taken from there to a distant home on the prairies? Had they been gathered in the olden days for the daughter's wedding, or for the younger girl's graduation from school?

They have multiplied in our gardens sending up new suckers each year, blossoming both in sunshine and in shade. The rose itself is very beautiful with its dark green foliage, seldom attacked by aphids or by beetle, and its cherry red petals opening out to show a wealth of golden stamens. Gathered for the house they keep their dainty crispness. But cut the buds if you want your enjoyment of them to linger.

M. R. CASE.

Weston, Mass.

ANCHUSA MYOSOTIDIFLORA.

Lovely as a ground cover is the low *anchusa myosotidiflora* which keeps its forgetmenot blue flowers from June to September. The tall *anchusas*, *Dropmore* and *Italica*, have vanished from my garden but the *myosotidiflora* blooms on and increases, covering the ground where it was planted. It increases by spreading its roots through the soil and sending up fresh shoots from them. At Hillcrest it grows in a warm half-shady place and in a cool shady spot by our wood road. It has begun to blossom just as the flowers of the true *myosotis* are changing into seed. The delicate sprays of blossoms have the pink buds and yellow eyes of the true *myosotis*. They grow on stems from eight to ten inches high. We cover them with leaves through the winter and they were not harmed by the cold weather of 1917 and '18. By growing the *anchusa myosotidiflora* one can apparently have lovely blue forgetmenots all summer.

M. R. CASE.

LAWNS AND LAWN-MAKING.

By George C. Watson.

The making of a good lawn starts long before the sowing of the lawn grass seed. I appreciate the importance of good lawn grass seed, but I appreciate still more the foundation of a foot deep of good soil; and when I say a foot deep of good soil I don't mean the kind you dig out of the cellar, 10 or 20 feet below the surface. I mean the surface soil, which is the only soil that's got any fertility. This surface soil matter is the first thing that must be understood. Those who have been brought up on the farm (like the writer and other seedsmen) know all about it, and think, naturally enough, that everybody else ought to know, but they don't. Most of us who have not been brought up on the farm, I have found by an experience of thirty-five years behind the seed counter, think that soil is just soil, and one soil is just as good as another in which to grow grass or anything else! No, the top soil is the only kind. It may have taken a million years to accumulate on the surface, and yet you let your house-builder bury it under the excavations from your cellar, and then wonder why the grass seed doesn't thrive. The writer would prefer not to dwell on the point; it seems so infantile. Yet on that one point most of the failures fundamentally hinge. Few amateurs realize that grass needs just as good soil as celery or cabbage. Many of them seem to think grass will grow on rocks.

So then, it will be understood that, when we say a foot deep of good soil, it means top soil from some old farm land, and not cellar-diggings.

Furthermore, after you have your foot of good top soil, add five pounds of bone-meal or ten pounds of sheep manure to each space 10 by 10 feet. The reason for using bone-meal or sheep manure rather than the ordinary barnyard manure is that the latter is apt to be full of weed seeds.

Killing Weeds.

And speaking of weeds brings us to another point: All soils will bring forth more or less surface weeds the first year. George Troup, superintendent of the park system of the city of Buffalo, gave it as his opinion that all ground intended for a lawn should be



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"fallowed" one summer before sowing the grass seed. By that he meant that after plowing, harrowing, raking and smoothing, the land should be left idle. If this be done, in a couple of weeks up will come the crop of surface weeds. Hoe them. By and by, another crop. Hoe them, also. Late in the summer there will be another, but very thin this time. Hoe them out, too. And then your ground will be ready for the lawn grass seed, and there will be no kick about the weeds supposed to have come in the grass seed that was sown.

But the average man or woman can't wait that long. They want to have a green lawn in a month, weeds or no weeds. And we are with them. But don't blame the seedsman for the weeds. They are not in the seed but in the soil.

Now then, having got your ground well drained, plowed, harrowed and smoothed, with a foot of good top soil, well manured, and all inequalities such as rocks, roots and stones cleared off you are ready for the seed. The seed to use is the best kind of seed that the experience of all the great experimenters from the Hortus Gramineus Woburnensis down to Faunce de Laune, Flint, Lawson and Barron can tell us about.

Something About the Best Grasses.

Nearly every seedsman says his mixture of grass seed for lawns and pleasure grounds is the "perfect" mixture, but perfect lawn grass seed for all purposes has not yet been found, and never will be found. So when a seedsman talks that way, he talks in a Pickwickian sense.

Many good gardeners tell us that a mixture is unnecessary. The Kentucky Blue Grass is all that is necessary to make a perfect lawn. This is so far true that seedsmen have now come to make this grass (*Poa pratensis*) the foundation of their lawn formulas. The reasons for adding other varieties to the *Poa pratensis* are various, one of the principal being that this fine species does not stand our hot summers so well as some others, and also because it does not reach its full development until the third year. Then again, it will not do as well as will its cousin, *Poa nemoralis* (Wood Meadow Grass) under the shade of trees.

Comes another condition: On an upland where the soil is light, there is nothing better than the Sheep's Fescue, fortified with some of the more tender sorts that can shelter under its wing.

For a tennis-green or golf-course, or for any piece of grass where there is

much walking over, Crested Dog's Tail and Hard Fescue should always be used in good liberal proportions along with the other sorts. Some species start earlier in the spring than Kentucky Blue, and some continue later in the fall. Sweet Vernal is greatly valued on account of its early growth. Creeping Bent (*Agrostis stolonifera*) is a valuable permanent species, especially where the land is at all inclined to be wet or fundamentally acid. In New England and along the Atlantic seaboard this grass is often sown alone to make a lawn, and it is included in liberal proportions in making up a good Lawn Mixture.

To make a good putting-green, only two varieties ought to be used: *Festuca tenuifolia* and *Cynosurus cristatus*.

To make a good grass for shady places, use *Poa nemoralis* and *Festuca rubra* as a foundation, then make up the balance with good lawn grass mixture.

To make the outlying links, the cheaper kind of seeds will do, as no fine turn is required. Timothy, Orchard, Red Top, etc., will be all right, and are less expensive.

For a terrace, use sod, three years old, grown from a good Lawn Grass mixture.

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September 9-11, Hartford, Conn.—Fall flower show of the Connecticut Horticultural Society. Alfred Dixon, secretary, Wethersfield, Conn.

September 11-14, Boston, Mass.—Dahlia, fruit and vegetable exhibition of the Massachusetts Horticultural Society. Wm. P. Rich, secretary, Horticultural Hall, Boston.

September 16-17, Ardmore, Pa.—Exhibition of dahlias, outdoor cut flowers and vegetables of the Pennsylvania Horticultural Society. David Rust, secretary, 606 Finance Building, Philadelphia.

September 18-19, Providence, R. I.—Dahlia show of the Rhode Island Horticultural Society. E. K. Thomas, secretary, Kingston, R. I.

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HOW TO KILL AN ORGANIZATION.

By Theodore Olpp.

1. Miss as many meetings as you can.
2. If you are a member don't think of attending.
3. If you do attend, be sure to find fault with the officers and fellow members.
4. Decline all offices, as it is easier to criticise than do things.
5. Get sore if you are not put on a committee.
6. And if put on, fail to act.
7. If the chair asks for your opinion, be sure to keep silent, but later tell others what should have been done.
8. Do as little yourself as possible, and when others roll up their sleeves to help things along, howl because the clique is running things.
9. Delay in paying your dues as long as you can and delay answering all requests.
10. Never bother about getting new members; let George do it.—*Market Growers' Journal.*

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Restrictions entirely uncalled for and eliminations made sweeping and universal by ignorance is the way the recent ruling of the Federal Horticultural Board at Washington appears to the firm of Henry A. Dreer of Philadelphia. In a circular issued in protest of the drastic regulations the firm calls attention to what the quarantine will mean not only to dealers but to the public.

The Philadelphia Ledger also quotes J. Otto Thilow of the Dreer store as follows: "The ruling is entirely too sweeping. It was made sweeping by ignorance. The members of the board thought roses were imported with soil clinging to them. They did not seem to realize the quarantine will exclude from our country a great many choice plants and shrubs. Most of them we will not be able to reproduce here, for we do not have suitable climatic conditions. We cannot bottle the climatic conditions of other countries and spread them around plants we desire to develop here.

"The whole thing was launched upon us very suddenly and very drastically. There was no real need of it. For the last fifty years roses have been examined and fumigated both before they left European countries and before they were permitted to enter here, and all agricultural products have been treated in the same way.

"The members of the board are too entomological. There is not one real horticulturist on it. What they should have done was to have made the regulations concerning inspection and fumigation more drastic. But, as it is now, not a thing that Belgium grows can enter here. Ground which is brought from Europe as ballast for vessels is dumped at Girard Point in the sunlight, where any number of things might develop, and no one says a word about it."

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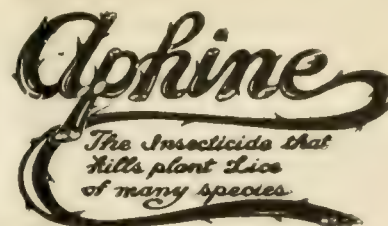
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THE A. T. STEARNS LUMBER COMPANY
NEPONSET, BOSTON

THE PUBLICITY CAMPAIGN.

The success of our campaign is believed to be phenomenal. It is not only within the observation of florists, it is talked of in many other lines of industry. Our slogan "Say it with Flowers," is said to have a "punch" that is to be envied—just the right thing not mandatory, but so strongly suggestive. Are we taking full advantage of it? There's the rub. We know that we are not, for the reason that too many florists are not sufficiently wideawake to lend a helping hand in spreading it. Our committees, officers and many of our enthusiastic members have "worked like beavers," for a year and a half, incessantly, in an effort to make all florists see the wisdom and far-reaching effect of our Publicity Campaign, but there are some "logs" on which teeth as yet have failed to leave a mark. While it is felt that this labor has not been lost, it is fervently hoped that response will materialize very quickly now. How much nicer it would be were those whom we are obliged to designate "non-subscribers" would voluntarily send in the sub-

scriptions we know they are prompted to make, rather than wait until a personal representative should call upon them.

To be obliged to cease effort simply for the reason that the requisite funds were not forthcoming would mean nothing less than disaster. Our regular and persistent reminder to a forgetful public has worked wonders for the florists' trade. We must keep the work going and you, Mr. Nonsubscriber, surely will not refuse to share in the expense. Think of Mr. Murray's generosity and farsightedness. Think of the many liberal-minded and level-headed business men whose names and generous contributions appear in our subscription list, which has been, and will again in a few days be sent broadcast among the trade, and decide whether you cannot follow their lead. If you want to be stingy, let your stinginess show in some other direction, don't refuse to put your mite into the palm of the hand which is helping your business so much—your business just as much as that of anyone else.

JOHN YOUNG, Sec.

1170 Broadway, June 28, 1919.

Dreer's Peerless Glazing Points

For Greenhouses

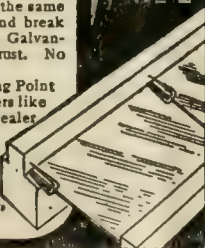
Drive easy and true, because both bevels are on the same side. Can't twist and break the glass in driving. Galvanized and will not rust. No rights or lefts. The Peerless Glazing Point is patented. No others like it. Order from your dealer or direct from us.

1000, 90c. postpaid.

Samples free.

HENRY A. DREER,
714 Chestnut Street,
Philadelphia.

FULL
SIZE
No 2



MASTICA

For Greenhouse
Glazing

USE IT NOW

F. O. PIERCE CO.

12 W. BROADWAY
NEW YORK



Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Lasts longer than putty. Easy to apply.

HOW TO KEEP SWEET PEAS IN FLOWER

Many people grow their plants well until August is well advanced, when they begin to get into an unsatisfactory condition, and their blossoming period comes to an untimely end. All this may be avoided if a little attention is given to the plants. Immediately deterioration is noticeable in the quality of the flowers, all blooms and seedlings should be removed, thus concentrating all the energy of the roots on the development of the growth of the plants. The soil should be forked over round about the clumps or down the side of the rows, and the plants given a copious application of water, to be followed immediately by manure water. This will stimulate the growth and if nitrate of soda at the rate of half an ounce to a gallon of water be applied subsequently, growth will be of a very satisfactory character, and a new lease of life be given to the plants. Should the weather continue hot, it is a good plan to syringe overhead with clear water in the late afternoon or evening, this also contributing to their well being. In very open and exposed situations, it is a good plan also to mulch both sides of the rows, or round about the clumps of the Sweet Peas. In some cases, where the plants appear to be so bad as to be beyond recovery, the grower should not despair. By adopting drastic measures it is possible to make even the most unpromising plants render a good account of themselves for some little time to come. It is a good plan in such circumstances to cut back the plants to two-thirds of their height, applying water and mulching, as advised earlier. It is astonishing what a wonderful yield of new growths will respond to this treatment of the plants, and we know of Sweet Peas that have blossomed well into the autumn where these measures have been adopted. Those who desire to maintain the display in their gardens for some time to come may adopt either of the methods above suggested with every confidence.—*Gardening Illustrated.*

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden

Brong Park NEW YORK CITY

NEW YORK QUOTATIONS PER 100. To Dealers Only

	Last Part of Week ending June 28 1919		First Part of Week beginning June 30 1919	
American Beauty, Special	20.00	to 35.00	15.00	to 35.00
" " Fancy and Extra	12.00	to 20.00	10.00	to 15.00
" " No. 1 and culls	2.00	to 10.00	2.00	to 8.00
Russell, Hadley	3.00	to 30.00	3.00	to 15.00
Killarney, Ward	2.00	to 6.00	2.00	to 6.00
Radiance, Taft, Key	3.00	to 25.00	3.00	to 20.00
Ophelia, Sunburst	3.00	to 10.00	2.00	to 8.00
Carnations	3.00	to 8.00	1.00	to 3.00
Cattleyas	20.00	to 50.00	25.00	to 125.00
Lilies, Longiflorum	10.00	to 12.00	15.00	to 40.00
Lilies, Speciosum	.....	.....	.....	.....
Callas	8.00	to 16.00	8.00	to 12.00
Iris	4.00	to 6.00	1.00	to 3.00
Lily of the Valley	2.00	to 6.00	6.00	to 15.00
Snappdragon	8.00	to 6.00	1.00	to 2.00
Pansies	.50	to 1.00	.10	to .50
Calendula	5.00	to 25.00	2.00	to 3.00
Stocks	2.00	to 6.00	1.00	to 4.00
Wallflowers	.....	.....	1.00	to 2.00
Mignonette	2.00	to 3.00	1.00	to 2.00
Sweet Peas	.75	to 2.00	1.00	to 2.00
Marguerites	1.00	to 2.00	.25	to 1.00
Gardenias	6.00	to 25.00	5.00	to 25.00
Adiantum	.75	to 1.25	.50	to .75
Gladioli	6.00	to 12.00	4.00	to 6.00
Asparagus Plumosus, & Spreng (100 bunches)	15.00	to 30.00	15.00	to 25.00

WHOLESALE FLOWER MARKETS — TRADE PRICES — Per 100 TO DEALERS ONLY

	BOSTON July 2		ST. LOUIS June 30		PHILA. June 30	
Roses						
Am. Beauty, Special	25.00	to 35.00	50.00	to 60.00	30.00	to 40.00
" " Fancy and Extra	12.00	to 20.00	25.00	to 40.00	20.00	to 30.00
" " No. 1 and culls	1.00	to 6.00	5.00	to 15.00	5.00	to 15.00
Russell, Hadley	4.00	to 18.00	3.00	to 15.00	10.00	to 25.00
Killarney, Ward	2.00	to 6.00	3.00	to 5.00	3.00	to 6.00
Radiance, Taft, Key	3.00	to 12.00	3.00	to 8.00	10.00	to 25.00
Ophelia, Sunburst	2.00	to 8.00	2.00	to 6.00	3.00	to 10.00
Carnations	1.00	to 2.00	2.00	to 3.00	4.00	to 6.00
Cattleyas	50.00	to 75.00	50.00	to 75.00	50.00	to 75.00
Lilies, Longiflorum	16.00	to 25.00	20.00	to 25.00	30.00	to 35.00
Lilies, Speciosum	8.00	to 20.00	.....	.....	.....	.....
Callas	16.00	to 20.00	15.00	to 25.00	20.00	to 25.00
Iris	2.00	to 4.00	6.00	to 10.00	10.00	to 15.00
Lily of the Valley	16.00	to 20.00	10.00	to 14.00	8.00	to 10.00
Snappdragon	4.00	to 12.00	2.00	to 4.00	8.00	to 10.00
Pansies	.25	to 1.00	.....	.....	5.00	to 6.00
Calendula	1.00	to 2.00	2.00	to 3.00	2.00	to 3.00
Stocks	1.00	to 4.00	5.00	to 8.00	.50	to .75
Wallflowers	3.00	to 4.00	.....	.....	.....	.....
Mignonette	2.00	to 4.00	2.00	to 4.00	3.00	to 4.00
Sweet Peas	.25	to 1.00	.20	to .50	.50	to 1.00
Marguerites	1.00	to 4.00	1.00	to 2.00	.50	to .75
Gardenias	16.00	to 25.00	.....	.....	30.00	to 40.00
Adiantum	1.00	to 1.50	10.00	to 12.50	1.00	to 1.50
Gladioli	16.00	to 25.00	8.00	to 10.00	8.00	to 12.00
Asparagus Plumosus, & Spreng (100 Bchs.)	20.00	to 50.00	25.00	to 75.00	50.00	to 60.00

WHOLESALE FLOWER MARKETS — TRADE PRICES — Per 100 TO DEALERS ONLY

	CINCINNATI June 30		CHICAGO June 30		BUFFALO June 3		PITTSBURG June 30	
Roses								
Am. Beauty, Special	40.00	to 50.00	50.00	to 60.00	30.00	to 40.00	40.00	to 50.00
" " Fancy and Extra	30.00	to 35.00	35.00	to 40.00	20.00	to 30.00	18.00	to 25.00
" " No. 1 and culls	8.00	to 20.00	12.00	to 15.00	3.00	to 10.00	10.00	to 15.00
Russell, Hadley	8.00	to 15.00	5.00	to 30.00	6.00	to 10.00	0.00	to 20.00
Killarney, Ward	3.00	to 10.00	5.00	to 15.00	3.00	to 8.00	4.00	to 12.00
Radiance, Taft, Key	6.00	to 15.00	5.00	to 25.00	3.00	to 10.00	6.00	to 12.00
Ophelia, Sunburst	5.00	to 10.00	5.00	to 15.00	1.00	to 5.00	6.00	to 12.00
Carnations	2.00	to 3.00	6.00	to 12.00	2.00	to 3.00	4.00	to 10.00
Cattleyas	60.00	to 75.00	60.00	to 80.00	75.00	to 85.00	100.00	to 125.00
Lilies, Longiflorum	15.00	to 20.00	15.00	to 20.00	15.00	to 20.00	20.00	to 25.00
Lilies, Speciosum	.....	.....	.....	.....	6.00	to 10.00	.....	.....
Callas	12.00	to 15.00	12.00	to 18.00	15.00	to 20.00	20.00	to 25.00
Iris	6.00	to 8.00	15.00	to 20.00	3.00	to 5.00	4.00	to 6.00
Lily of the Valley	6.00	to 8.00	5.00	to 8.00	8.00	to 10.00	10.00	to 12.00
Snappdragon	8.00	to 10.00	10.00	to 20.00	2.00	to 3.00	1.00	to 1.50
Pansies	1.00	to 1.50	.50	to 1.00	.50	to 1.00	4.00	to 6.00
Calendula	3.00	to 3.00	3.00	to 5.00	1.00	to 3.00	2.00	to 4.00
Stocks	4.00	to 6.00	6.00	to 12.00	2.00	to 5.00	.....	.....
Wallflowers	.....	.....	1.00	to 2.00	.....	.....	.....	.....
Mignonette	6.00	to 8.00	6.00	to 8.00	2.00	to 5.00	3.00	to 4.00
Sweet Peas	.75	to 1.00	1.00	to 3.50	.50	to 1.50	.75	to 1.50
Marguerites	2.00	to 3.00	1.00	to 3.00	.50	to 1.00	2.00	to 3.00
Gardenias	.....	.....	15.00	to 25.00	15.00	to 20.00	.....	.....
Adiantum	.....	.....	1.00	to 1.25	.50	to 1.00	1.50	to 2.00
Gladioli	6.00	to 12.00	5.00	to 12.00	8.00	to 10.00	6.00	to 12.00
Asparagus Plu. & Spreng (100 Bchs.)	25.00	to 50.00	50.00	to 100.00	35.00	to 50.00	60.00	to 75.00

GULF CYPRESS**Greenhouse Materials**

Pecky Cypress Bench Lumber

GLASS

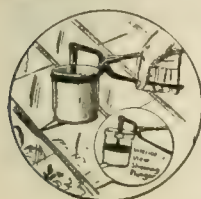
GULF CYPRESS

HOT BED SASH

ALL KINDS AND SIZES

Unglazed\$0.85 up
 Glazed 2.05 up

THE ONLY PERFECT

LIQUID PUTTY MACHINE

Will last a lifetime,
 \$1.25 each

**"SEAL TIGHT
LIQUID PUTTY"**

will not harden,
 crack or peel off.
 \$1.35 per gallon in
 10 gallon lots.

\$1.40 per single
 gallon.

HOSE

Non-Kink Woven

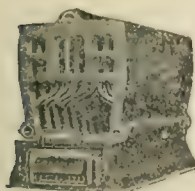
In any length (one piece) with
 couplings, 15c. per foot. Un-
 equalled at any price.

**HOSE VALVE 75c**

All brass except the hand
 wheel. Has a removable
 leather disk which is easily
 replaced to keep water tight.
 Stuffing box prevents leaks at
 stem.

BOILERS METROPOLITAN

Patented



Very best green
 house boiler of its
 size. Will do more
 work than any
 other. Comes in all
 sizes. Quickest act-
 ing—almost instan-
 taneous. Offered at
 our old prices. Or-
 der at once.

Metropolitan Material Co.

PATENTED GREENHOUSES

1297-1325 Flushing Ave., Brooklyn, N. Y.

MORE ABOUT LABELS.

The question of good labels is con-
 tinually coming up. A writer in the
 Flower Grower contributes the follow-
 ing from her experience.

Wood.—White pine stakes well
 painted with white-lead and linseed
 oil, and labeled with lamp-black and
 linseed oil may be depended upon for
 years of service, whether in or out of
 the ground. The little pointed white
 pine labels are better bought unpaint-
 ed, if for outdoor service, as the paint
 put on at the factory fluffs off from
 exposure to the weather, and carries
 the writing with it. The unpainted la-

CLASSIFIED DIRECTORY

Advertisements in this Department, Ten Cents a Line, Net

BULBS

C. KEUR & SONS, HILLEGOM, Holland.
 Bulbs of all descriptions. Write for prices.
 NEW YORK BRANCH, 8-10 Bridge St.

CANNAS

For the best Up-to-Date Cannas, get new
 price list. THE CONARD & JONES CO.,
 West Grove, Pa.

CARNATION STAPLES

Split carnations quickly, easily and
 cheaply mended. Pillsbury's Carnation
 Staple, 1000 for 35c.; 3000 for \$1.00 post-
 paid. I. L. PILLSBURY, Galesburg, Ill.

CELERY PLANTS

Celery Plants, Easy Blanching; now
 grown exclusively by 90% of Kalamazoo
 growers in place of Golden Self Blanching.
 Strong plants, ready for the field; \$2.25 per
 1,000; \$6.00 for 3,000. Cash. BRILL CEL-
 ERY GARDENS, Kalamazoo, Mich.

DAHLIAS

Peony Dahlia Mrs. Frederick Grinnell.
 \$10.00 per clump. Cash with order.
 JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker,
 Newest, Handsomest, Best. New color, new
 form and new habit of growth. Big stock
 of best cut-flower varieties. Send list of
 wants to PEACOCK DAHLIA FARMS,
 Berlin, N. J.

KENTIAS

Kentia Belmorenan—Averaging 3 and 4
 leaves, good strong plants out of 2 1/4-inch
 pots at \$15 per 100—larger quantities on
 application. J. H. FIESSER, 711-741
 Hamilton Ave., North Bergen, N. J.

PEONIES

Peonies. The world's greatest collection,
 1200 sorts. Send for list. C. BETSCHER,
 Canal Dover, O.

SPHAGNUM MOSS

Live Sphagnum moss, orchid peat and
 orchid baskets always on hand. LAGER
 & HURRELL, Summit, N. J.

VINES

Flowering and Foliage Vines, choice
 collection. Large Specimen, Pot and Tub
 grown for immediate effect; also Climbing
 Roses. J. H. TROY, Mount Pleasant Nur-
 sery, New Rochelle, N. Y.

WIRE WORK

WILLIAM E. HEILSCHER'S WIRE
 WORKS, 264 Randolph St., Detroit, Mich.

DREER'S "Riverton Special" Plant Tub

No.	Diam.	Ea.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton Tub is sold exclusively by us, and is the best ever introduced.
 The neatest, lightest, and cheapest. Painted green and bound with electric-welded
 hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER, Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.

bels, if written on with proper pencil,
 are perfectly good for one season, and
 so cheap it does not pay to use any-
 thing else, or to go to extra trouble
 with them. The pencil I have used is
 Eberhard Faber, weatherproof 6639.
 The common purple indelible pencil is
 in favor with many plant shippers,
 written dry and then developed by the
 moisture of the package. The writing
 can be safe-guarded by dipping the
 tag, when perfectly dry, in viscol.

Paper.—Tough manila tags, written
 on with the weatherproof pencil, prob-
 ably also with the indelible pencil and
 then soaked with viscol, will stand the
 weather several years.

Viscol is sold by the shoe stores for
 weatherproofing shoes. It is a rub-
 bery petroleum material thinned with
 gasoline, presumably.

Zinc.—Zinc strips, stamped with
 combinations and repetitions of such
 marks as 1, X, O, will last a lifetime,
 either in the ground or out of it. Of
 course a record must be kept of the
 marks. There is a chemical mixture

which, written on zinc with a quill,
 gives a dead black record which will
 stand the weather or soil for many
 years.

PATENTS GRANTED.

1,304,926. Cultivator. Samuel L. Allen,
 Moorestown, N. J., assignor to S. L.
 Allen & Co., a firm composed of
 Samuel L. Allen, William H. Roberts
 and Elizabeth H. Richie.

1,304,992. Corn-Planter. Colonel Wol-
 ford Lanham, Chicago, Ill.

1,305,099. Combined Tractor and Gang-
 Plow. Thaddeus S. Harris, Waverly,
 Ill.

1,305,215. Soil-Pulverizer. Domenick
 Iodice, Watertown, Mass.

The Japanese or dwarf barberry
 (*Berberis thunbergii*) does not rust.
 It is entirely harmless and should not
 be disturbed. This is very fortunate,
 because it is a beautiful bush which
 can be used to replace the common
 barberry to a considerable extent.

THE BOILER OF Unequalled Fuel Economy

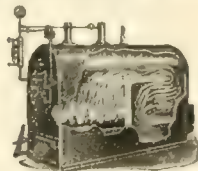
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.



Today is the day to place your order for Sash Operating Device or Greenhouse Fittings which you are in the market for. Prices are going to remain unchanged and we are The Concern that has the right goods at the right price. Write us today for further information.

ADVANCE CO.
Richmond, Ind.

WE ARE SPECIALISTS IN GREENHOUSE GLASS

Free from Bubbles
Uniform in Thickness

PAINTS and PUTTY

Greenhouse White (Semi-Paste) The Paint Particular Florists Prefer

It will pay you to get our estimates.

THE DWELLE-KAISER CO.

251 Elm Street BUFFALO, N. Y.

PATENTS

Trademarks and Copyrights

Difficult and rejected cases specially solicited. No misleading inducements made to secure business. Over 30 years' active practice. Experienced personal, conscientious service. Write for terms. Address

SIGGERS & SIGGERS

PATENT LAWYERS
Box 9, National Union Building
Washington, D. C.

Principles and Practice of Pruning

By M. G. KAINS

Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

After a few pages of introduction the author discusses Plant Physiology as related to pruning. A chapter takes up the Philosophy of Pruning, itself a very interesting subject. Then follows a classification and clear discussion of Buds, very fully illustrated from life. How Wounds Heal is an exceedingly interesting chapter, as are also those on Prevention and Repair of Mechanical Injuries, Pruning Nursery Stock, Young Trees, Mature Trees and Odd Methods of Pruning and Training, Rejuvenating Neglected Trees and Practical Tree Surgery.

Profusely illustrated. 400 pages. 8 1/2 x 5 1/2 inches.
Cloth. Net, \$2.00.

HORTICULTURE PUBLISHING CO.
147 Summer St., Boston, Mass.

Plant Propagation, Greenhouse and Nursery Practice

By M. G. KAINS

We have had many inquiries from time to time for a reliable and up-to-date book on plant propagation, but were always at a loss to find any publication that we could recommend. The subject has been dealt with in fragmentary manner only in books that have come to our notice. So it is well that this new work has been issued, especially as it is both comprehensive and practical, and it should meet with a ready sale among plantmen, nurserymen and gardeners. There are nineteen chapters covering in detail topics of germination and longevity of seeds, propagating by buds, layering, cuttings, grafting, etc., fruit tree stocks, scions, etc., and there are eight pages of condensed cultural instructions in tabulated form, covering annuals and perennials from seed, woody plants, evergreens, vines, bulbs and tubers, greenhouse and house plants, ferns, palms, water plants, orchids and cacti. The illustrations are numerous, comprising 213 figures and halftone plates. There are 322 pages well bound and on heavy paper, teeming with helpful information. It is a book which no cultivator can afford to do without. It is worth many times its price. Copies can be supplied from the office of HORTICULTURE at publisher's price, \$1.50.

HORTICULTURE PUBLISHING CO.
147 Summer St., Boston, Mass.

In Writing to Advertisers kindly mention Horticulture

HORTICULTURE

Vol. XXX

JULY 12, 1919

No. 2

ROSES

OWN ROOT, 3-INCH, \$15.00 PER 100
\$140.00 PER 1,000

- 2000 CECILE BRUNNER
- 1200 HADLEY
- 1000 COLETTE MARTINET
- 4000 WHITE KILLARNEY
- 2000 DBL. WHITE KILLARNEY
- 2200 KILLARNEY BRILLIANT
- 3000 MRS. AARON WARD

A. N. PIERSON, Inc.
CROMWELL, CONN.



GLADIOLI

King, America, Halley, Schwaben, and other good varieties, well grown stock, long stems.

\$6.00, \$8.00 and
\$10.00 per 100

Everything in
Cut Flowers, Plants, Greens,
Ribbons and Supplies

BUSINESS HOURS
7 A. M. to 4 P. M.

S. S. PENNOCK COMPANY

The Wholesale Florists of Philadelphia

NEW YORK
117 W. 28th St.

PHILADELPHIA
1608-1620 Ludlow St.

BALTIMORE
Franklin & St. Paul Sts.

WASHINGTON, 1216 H St., N. W.

Winter-Flowering Roses

We still have left about five thousand **ROSALIND** (Glorified Ophelia). This is much darker than the original Ophelia. Buds are bright coral, which changes to a clear pink when flowers are developed. One of our best sellers. Strong plants, 3½-in. pots, \$30.00 per 100.

We can supply, also, the following varieties in more or less limited quantities as long as unsold, strong plants from 3½-inch pots:

COLUMBIA and MRS. CHAS. RUSSELL.....	Per 100 \$40.00
SILVIA (Yellow Ophelia).....	30.00
FRANCIS SCOTT KEY, DOUBLE WHITE KILLARNEY, KILLARNEY BRILLIANT, HOOSIER BEAUTY, OPHELIA, SUNBURST, and MIGNON, or CECILE BRUNNER..	25.00

FERNS

We have a splendid lot of ferns for immediate shipment, in the following varieties and sizes:

NEPHROLEPIS elegantissima compacta, mucosa, and Smithii, 3½ inch.....	Each \$.35
NEPHROLEPIS elegantissima compacta and superbissima, 6 inch.....	.75
NEPHROLEPIS mucosa and Smithii, 5 inch.....	.75
NEPHROLEPIS elegantissima and Harrisii, 8 inch.....	2.00
NEPHROLEPIS elegantissima, 10 inch.....	4.00
NEPHROLEPIS nanus (Dwarf Boston), 8 inch.....	1.50

LARGE SPECIMEN HYDRANGEA

FOR JULY AND AUGUST FLOWERING

MME. E. MOILLERE (white); HORTENSIS and OTAKSA (pink). Grown in butter tubs; about 18 to 24 flowers per plant.....	Each \$4.00
MME. E. MOILLERE and OTAKSA. Extra large specimens grown in half-barrels; 4 to 4½ ft. spread, well budded, just beginning to show color.....	\$15.00 to \$25.00—according to size

F. R. PIERSON, Tarrytown, N. Y.

Geraniums

We have a fine lot of 2-inch stock for immediate shipment, and are also booking orders for next season at the current price of **\$2.75 per 100, \$22.50 per 1,000**, in a good assortment of popular kinds such as **S. A. Nutt, Edmund Blanc, Mad. Racamier, General Grant, etc.**, also a good assortment of singles which will make good winter blooming stock.

Hardy English Ivy

2-inch, \$2.50 per 100, \$22.50 per 1,000

FERNS

Boston and Scottii, 5-inch pot grown at **\$4.80 per dozen, \$35.00 per 100**, shipped without pots.
Table Ferns, assorted 3-inch, **\$6.00 per 100.**

Cash With Order.

R. Vincent, Jr., & Sons Co.

WHITE MARSH, MARYLAND

CYCLAMEN PLANTS Farquhar's Gold Medal Strain

Strong Plants in 3½ in. pots, \$25.00 per 100
Trade Price on Application

R. & J. FARQUHAR & CO. - - - BOSTON, MASS.

IF in need of RELIABLE NURSERY STOCK

that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**

Wholesale and Retail

NORTH ABINGTON, MASS.

BOBBINK & ATKINS

NURSEYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's Fund for Market Development, also "Say It With Flowers" Publicity Campaign.

ORCHIDS

We grow and sell nothing but ORCHIDS. If you are in the market for this class of plants we respectfully solicit your inquiries and orders. Special lists on application.

LAGER & HURRELL, Summit, N. J.

We are Headquarters for the **BEST OF EVERYTHING**

IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc., 166 Chamber of Commerce Bldg., Boston, Mass.

J. BOLGIANO & SON

Careful Seed Growers and Seed Distributors for One Hundred Years

WRITE FOR OUR 1918 SPECIAL CATALOGUE
To Market Gardeners and Florists

Print and Light Sts., BALTIMORE, MD.

STUMPP & WALTER CO.

Seeds and Bulbs

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SEEDS, BULBS, PLANTS

JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

BURNETT BROS. Seeds, Bulbs, Plants Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

W. E. MARSHALL & CO. SEEDS, PLANTS AND BULBS Horticultural Sundries

166 W. 23rd St., NEW YORK

GARDEN SEED

BET, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

S. D. WOODRUFF & SONS
32 Day St., NEW YORK and ORANGE, CONN.

Register your name for our
Wholesale Catalogue of
**FRENCH AND HOLLAND
BULBS**

Ready Shortly

Also PERENNIALS for FLORISTS,
ask for Special Prices.

J. M. THORBURN & CO.

53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON

SPECIALIZE IN

SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or
Forward

Only Address, LANGPORT, Eng.

FREESIA PURITY

IMPROVED

Per 1000

¾ to ½ inch.....	\$6.00
½ to ¾ inch.....	9.50
Mammoth Bulbs, ¾ to ½ inch.	15.00
Large Jumbo Bulbs, ¾ inch...	18.00

AMERICAN BULB CO.

172 W. Wabash Ave., CHICAGO, ILL.

Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds.
Improved styles in Implements
Catalogue upon application.

16 So. Market Street
BOSTON, MASS.

When writing to advertisers kindly
mention **HORTICULTURE**

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

When writing to Advertisers kindly mention **Horticulture**

RAMBLING OBSERVATIONS OF A ROVING GARDENER

I have been somewhat surprised that more general use is not made in this country of weed killers, especially in times like these when labor is exceedingly scarce and high priced. A gallon of weed killer will save a vast amount of work in keeping walks, drives, courts, laundry yards and the like free from growth of any kind. Moreover, one application will last for a year. Only a few days ago I saw a young gardener laboriously digging a growth of weeds out of a driveway with a hoe. It was very hard, monotonous work, and seemed to me like a useless and unnecessary waste of time and strength. The fact that weed killers are used much more generally across the water is attested by the numerous advertisements which appear in the English papers. Just now considerable discussion has been brought about by the introduction of a weed killer which is entirely harmless to livestock of all kinds. Apparently there have been some losses in the past, as a result of poultry drinking from pools which have been poisoned by the material used, but the danger from this sort of thing, as conditions are in this country, is very slight. It would seem as though the use of a good weed killer should be taken as much as a matter of course as that of fertilizer or insecticide.

This has been a wonderful spring for climbing roses, and it is evident that the interest in them is growing rapidly among all classes. There was a good attendance at the recent rose show in Boston, and the show was one of the best held this season, although it was by no means as large as it ought to have been. The fact that it is possible to have a long season by choosing different varieties of climbing roses is commonly overlooked. The very earliest climber to bloom in my collection was the new rose Aunt Harriet, which was put out originally I believe by Conard & Jones, a large part of the stock then being sold to the Farm Journal, the publishers of which gave it its name. It is a very good red rose, and a strong grower, but its early blooming habit seems to be the greatest point in its favor.

The Climbing American Beauty has bloomed quite early, and so has Dr.

Van Fleet, a rose which is not easily surpassed. American Pillar has been in flower for a week, and excites more admiration than anything else I grow. In fact, it is the only rose which some visitors seem able to see. As this is written, Excelsa is just coming into bloom. I know of no climber which flowers more profusely, and I am sure there is no other rose in its class which is better adapted for training on a post, pillar or dead tree. It has short lateral branches arranged one above another to the very top. Growing on a cedar post it looks almost like a live tree; and the contrast in its habit of growth as compared with Purity close by is most marked.

Purity is a fine white rose, about equal to Silver Moon, but grows in a somewhat straggling fashion which interferes with the full expression of its beauty. Among the latest of the newer climbers to flower is Elizabeth Ziegler, put out by A. N. Pierson, I believe, and considered as an improvement over Dorothy Perkins. Some day, no doubt, we shall have a class of climbing roses flowering all through the summer. Then the climbing rose will certainly be among the most popular of all outdoor flowering plants.

What has been written in HORTICULTURE about the spoliation of the countryside by children is of course worthy of attention, but after all there are few children who show more downright lawlessness than many of the motorists who drive into the country from the towns. Some of these people seem to think that the owner of a country estate has no rights which a city man needs to respect. Several instances of pure bolshevism have recently come to my attention. A few days ago the owner of a large estate in a suburb of one of our cities told me that a party of men and women in automobiles had stopped in front of her house when her cherry trees were in full bloom and had deliberately pulled off armfuls of branches. When she finally left the house and remonstrated with them they told her that it was really none of her business, because very likely either she or her ancestors had come by their property in some underhand way, and that anybody had a right to help himself. There was nothing to do but watch these well dressed anarchists drive off with their booty.

This, however, was an even less unpleasant experience than that of another woman owning a large suburban estate. It happens that at one side of the grounds a flight of steps leads to the street. The owner of the place came out of the house and started to leave the grounds in this way, but found that the steps were occupied by a crowd of young men and young women who absolutely refused to rise in order that she might pass. In other words they would not allow her to leave her own grounds, and she finally went back.

This same woman had a number of waterfowls in a pond near the house and the dogs of passersby killed practically all of them, going into the water and striking them down with their paws.

I also heard of a case where an automobile party was found last fall raiding an apple orchard. They had a basket filled with apples, and although when they were discovered they finally went away, they refused as requested to leave the apples, which they had picked, but carried them off with them.

It would be an easy matter to multiply instances of this kind. In fact there is just one other of which I will speak, because it seemed particularly wanton. The owner of an attractive country home had planted a large number of somewhat rare ferns along a shady embankment. One day some people were found digging up these ferns and putting them into baskets. They were asked to desist and to leave the ferns which they had dug up, but they only laughed at the request and finally carried the ferns away, so that now only a few plants remain of what had been the owner's pride and joy.

Unfortunately many of the depredations are committed by men and women who seem to be educated Americans. In some sections, though, foreigners go out into the country in large numbers and are difficult to deal with. It isn't every gardener who has the initiative of one in New Hampshire. A party of Greeks came into the garden and began helping themselves to the products of the trees. When ordered to go away, they refused, and exclaimed in broken English: "Free country, free country. Free you, free me." Thereupon the gardener uncoupled the hose and turned a powerful stream upon the unwelcome visitors, who concluded that that particular garden was not so free as they had expected, and beat a hurried retreat.

FERNS

		Per 100	Per 1000
BOSTONS	2 1/4 inch	\$4.00	\$50.00
ROOSEVELTS	"	6.00	50.00
WHITMANI	"	6.50	55.00
WHITMANI COM-			
PACTA	"	6.50	55.00
VERONA	"	6.50	55.00
TEDDY, JR.	"	6.50	55.00

Stock all sold until June 1st.

Order either direct or through
S. S. Skidelsky & Co., Sole Agents
Philadelphia, Pa.

HENRY H. BARROWS, WHITMAN, MASS.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

SEED OF

Sim's Gold Medal Pansies

A fine selection of the best of that wonderful strain. If you want the very best don't fail to get some of this seed.

1/4 oz., \$4.00; 1/2 oz., \$7.50; 1 oz., \$15.00

Cash or satisfactory trade references.

No C. O. D. shipments

L. J. REUTER CO.
PLANT BROKERS

329 Waverly Oaks Road, Waltham, Mass.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$25.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.

ADRIAN, MICH.

VIBURNUM PLICATUM

Also Berberis Thunbergii, Hydrangea paniculata, Weigela, Spiraea, etc.

Ask for complete list of
OAK BRAND SHRUBS.

The CONARD & JONES CO. WEST GROVE
PENN., U.S.A.

Robert Pyle, Pres. Antoine Wimmer, Vice-Pres.
We are subscribers to the Nurserymen's Fund
for Market Development

ROBERT DYSART CERTIFIED PUBLIC ACCOUNTANT

Simple methods of correct accounting
especially adapted for florists' use.
BOOKS BALANCED AND ADJUSTED

40 STATE STREET BOSTON
Telephone Main 56

A Card This Size

Costs only 90c. per Week
on Yearly Order

It would keep your name and your
specialty before the whole trade.

A half-inch card costs only 45c. per
week on yearly order.

ROSES

	100	1000
Tauschendschon 2 1/2-inch	\$10.00	\$90.00
Dorothy Perkins 2 1/2-inch	10.00	90.00

FIELD GROWN ROSES

2 and 3-year old
Tauschendschon, Perkins, Excelsa,
Crimson Ramblers, Lady Gay, Hia-
watha and others. For Fall delivery
\$40.00 per 100, 1-year-old plants,
\$25.00 per 100.

GODFREY CALLAS

The true type

	100	1000
2 1/2-in. pots	\$5.00	\$40.00
3 -in. pots	7.00	60.00
3 1/2-in. pots	14.00	

C. U. LIGGIT, Office 303 Bulletin Bldg. Philadelphia, Pa.

IBOLIM The New Hybrid **HARDY PRIVET** (L. Iboia x Oval-
folium)
TO BE SENT OUT IN THE FALL OF 1919. Introducing of Box-Barberry.
Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.

FREESIA BULBS

Purity (Improved)

	Per 1000
Size 1 1/2-5/8ths inch (large).....	\$8.50
Size 5/8ths-3/4 inch (mammoth).....	13.50

NOW READY

CALLA LILY BULBS

Size 1 1/2-2 inches, \$9.00 per 100
Cash with order, less 2 per cent.

McHUTCHISON & CO., The Import
95 Chambers Street House
NEW YORK

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.

IRVINGTON, N. J.

SEEDS AND BULBS

Boddington's

128 Chambers St., N. Y. City

"WE HAVE POOLED."

The way some of our enthusiastic friends have overlooked their subscriptions to our Publicity Campaign reminds me of a story that appeared in "Tid-Bits" recently:

"I missed my regular morning exercise this morning."

"How was that?"

"The seven-thirty-five was late and I didn't have to run for it."

Everybody is agreed that our campaign is a good thing for the business generally but nevertheless we must have something to keep the expense of the campaign balanced and as an evidence of the effect of our National Publicity Campaign may we submit the advertisement below as a criterion that the florists too believe in pool advertising and that we recognized the benefits jointly.

Pool Advertising.

Advertising by associations is a development of recent years.

Suppose you were a grower of oranges, raisins, peaches or apples on the

Pacific coast—what could you do individually to advertise your own product?

Or suppose you raised cranberries or owned a saw-mill or tanned leather or manufactured Magnesia or quarried granite, you could advertise nationally only through your association.

Now the success of association advertising depends first of all on the creation of a strong governing power—a "boss."

Without a "boss," advertising may even disrupt the organization itself.

If the advertising is very successful, it will bring tangible returns and the resultant squabbles over the division of spoils cause dissensions.

Or if a select governing committee of seven to seventeen all take a hand, the advertising is so emasculated by inhibitions as to die of anaemia.

Pool advertising must have a control that will insure an adequate appropriation for at least three years and an impartial insistence on a maintenance of standards by all members.

HENRY PENN,
Chairman Publicity Committee.

HORTICULTURE

Vol. XXX

JULY 12, 1919

No. 2

NOVELTIES AND NURSERYMEN

The discussion in *HORTICULTURE* about the introduction of novelties, the apparent lack of enterprise on the part of some nurserymen, the value of advertising and the like, has aroused no little interest. Mr. Wyman, of the Framingham Nurseries, has written a letter in which he presents a phase of the matter which has not been taken up before. It may be that his point of view is not that of all nurserymen, and it will be interesting if a discussion can be started which will bring out the attitude of the trade in general. Mr. Wyman's letter follows:

"In the June 21 issue of *HORTICULTURE* under the heading "Rambling Observations of a Roving Gardener," the subject of advertising plant novelties attracted my attention. The author of the paragraph beginning "Rosa Hugonis was put across by publicity," if I mistake not, made a very similar utterance at the meeting of the New England Nurserymen's Association held in Boston last January.

"To his contention Mr. J. Edward Moon, the well-known Pennsylvania Nurseryman, gave the following answer: 'We cannot patent our plant novelties.' As everybody knows a manufacturer can patent any invention or discovery he makes and thereby receives protection for a period of several years. During this period only he can manufacture this article unless he permits others to manufacture upon a royalty basis.

"Again, as everybody knows, nurserymen have not this protection. We can spend time, effort and money in propagating, testing and advertising a new plant but our neighbor can steal a cutting or two or a few seeds, start propagating and when the demand has been created by the originator the aforesaid neighbor can reap the benefit without fear of legal prosecution. This is not a theoretical case at all.

"Please do not misunderstand my attitude as being opposed to advertising what you have to sell but along with Mr. Moon I maintain that it is seldom practical to advertise extensively any

plant novelty until the firm who originates or introduces this plant shall be afforded reasonable protection.

"This is undoubtedly a matter for the American Association of Nurserymen to take up. It would be necessary for the association to establish a plant registry having as its registrar a man well up in the horticultural world but not interested in the nursery business; a man such as Professor Sargent of the Arnold Arboretum, for instance.

"The next step would be to get a federal law enacted providing patent protection to the originating or introducing firm who had first registered the plant at the plant registry. Until such arrangements can be made, I believe it would be impracticable to advertise extensively any plant novelty."

Another Angle

Apparently there are many angles from which this whole question may be viewed. The attitude of the layman who is almost enough of an expert to be called a professional is reflected in an article by Louise B. Wilder, in the *Garden Magazine* for July. Under the title of "The Blindness of Dealers," Mrs. Wilder says: "Last month the editor (of the *Garden Magazine*) administered to the plant dealers, seedsmen, etc., a shaking up that has been wanting for a long time. May it bear fruit! It is not meet that American gardeners who are interested beyond the elementary stages of their craft should have to turn to Europe for material with which to pursue it. Just now the country is swept by a wave of enthusiasm for rock gardening; but how few are the rock plants that are to be procured at home! A search through dozens of catalogues will reveal few beyond the most ordinary kinds. In the matter of seed the situation is even more barren. A lady wrote me a few days ago, after reading an article in *Country Life* upon this phase of gardening, wherein only easily grown rock plants were mentioned, that she was unable to find seed of a single one of these plants in the catalogue of one of our most prominent eastern seedsmen! Just fancy! I should be ashamed to put into print the number of times a year I am under

the necessity of giving the names of foreign seedsmen to persons who inquire where they may find the seeds of plants that have been grown freely in my garden for years. English seedsmen are establishing in this country branches that are widely patronized. Are our seedsmen blind to this fact, or are they simply indifferent? And are they and the nurserymen unconscious of the nation-wide barter and trade that is going on among serious amateurs who divide and share their treasures down to the last detachable bit that knowledge of this great craft shall increase and interest in it be kept alive? And that because the dealers will not, or at all events do not, cater to the demand.

"A few years ago one of our most progressive nurserymen, who has since died, told me that at a gathering or convention of his fellows, he was severely taken to task by the head of another large nursery firm for his efforts to collect and introduce new plants to the American gardening public, on the grounds of "let well enough alone." This is significant and alarming. Of course there are persons here and there in the horticultural trade of our country who are doing good and progressive work, and to them all honor and gratitude is due. But the situation on the whole needs a deal of improving."

GIVEN CERTIFICATES OF MERIT.

Among the exhibits at the recent annual meeting of the American National Nurserymen's Association at Chicago, The Elm City Nursery Co., of New Haven, Conn., staged an attractive exhibit of BOX-BARBERRY, the new dwarf form of *Berberis Thunbergii*, also a specimen plant of the IBOLIUM Privet, the new hybrid form between *Ibota* and *Ovalifolium*, which is quite as hardy as *Ibota* and very much resembles California Privet in habit and general appearance. Both were given a Certificate of Merit by the Association. The Aurora Nursery Co., of Aurora, Ill., staged a fine plant of *Cotoneaster Acutus* which also received a certificate.

NEWS AND COMMENT

CINCINNATI.

Business is fairly active as far as summer business is concerned. The supply has shortened very considerably but still at the time of this writing there is enough to go around.

Roses are fairly plentiful. The white ones, however, are on the short side of the market. The carnation receipts are much smaller than they were a fortnight ago. Easter Lilies and Rubrum Lilies may be had. They are of good quality and are proving good property. Gladioli are selling well. Hardy Hydrangea meets with a fair demand. Snapdragon may be had. Other offerings are Water Lilies, Feverfew, Candytuft, Coreopsis and Cornflower.

Greens of all kinds are in a good supply and are selling well.

ST. LOUIS.

Julius Koenig, City Forester, has resigned and Park Commissioner Cunleff has appointed Fred Pape, former assistant forester.

The annual picnic of the St. Louis Florists' Club will take place the 17th day of July at Ramona Park.

Henry Ostertag was overcome by the heat at his store last week. He was removed to his home. His son, Charles, took care of the store.

BULLETIN OF PEONY NEWS.

Bulletin of Peony News No. 8 contains an important and interesting article by A. P. Saunders on "How to Hybridize Peonies." Professor Saunders writes largely from personal experience and what he says should be of no little value to all interested in this kind of work. This bulletin contains the paper by Wm. A. Peterson of Chicago, already reproduced in HORTICULTURE on the subject "How to make the most money out of an acre of Peonies." Various other notes and comments will be read with interest by peony growers.

NEW ENGLAND.

John J. Williams, florist, 1224 Cambridge street, Cambridge, Mass., has filed a petition in bankruptcy. His liabilities are given as \$3,774, and his assets as \$95.

John Moscarillo of Torrington, Conn. is to build an addition 160 feet long to his present range of greenhouses.

Gerard Schimmel, a graduate of a horticultural school in Holland, who came to Connecticut to work in the Pierson greenhouses in Cromwell and then for a time was one of the night supervisors in the Connecticut Hospital for Insane, is to go to California to engage in business.

The following is from "The Whirling Hub" column of the Boston Herald:

Give Herman H. Bartsch of Waverley, credit for being a green house man of the old school. He believes in the up-keep of his grounds on the outside of his greenhouse as well as the inside of the houses themselves and knows well how to make two blades of grass grow where one grew before. Passengers getting off the cars, at the end of the Waverley line, generally stop and look over "Herman's" place. They can't help it.

NEW JERSEY FLORIST MARRIED.

Mr. Chris Sanderson, the hustling young florist of Pine Ridge Greenhouses, and Miss Mary Powell, of Wallace avenue, were made man and wife at the new parsonage on West Centre street. Mr. and Mrs. Sanderson went to Atlantic City on their honeymoon and on their return will reside with Mr. and Mrs. Elijah Heritage, on Glover street (where Chris has made his home since coming to Woodbury) until their new home is built near his greenhouses.—Woodbury, N. J. Times.

PHILADELPHIA.

Pennock Bros. were recipients of quite a windfall of orders for memorial services of Dr. Anna Howard Shaw at Moylan, Pa. Every state in the Union was represented and prominent men and women in all walks of life contributed. It took three big delivery automobiles to convey the tributes. We understand that only two pieces came from any other florist outside of the Pennock Bros. who enjoyed a practical monopoly on this important occasion.

Recent visitors have been H. Reeve Darling, Darling Flower Shop, Los Angeles, Cal.; Mr. Miller, Miller Floral Co., Salt Lake City, Utah.

George Anderson still remains seriously ill, much to the regret of his many friends.

OBITUARY.

Thomas J. Wolfe.

Thomas J. Wolfe, one of the best known florists of Texas and former president of the Texas State Florists' Association, died last week after an illness of a year.

Tom Wolfe has been a resident of Waco for the last 27 years. He was born in Birmingham, England, September 19, 1875, and was reared in India, where he attended school as a boy. He came to Waco with his parents from Bombay, in 1892, and had lived here since that time.

He took active charge of the floral house established by his father, James Wolfe, at the latter's death, some years ago, and the firm was incorporated and known as Wolfe, the Florist, which became a household designation in Texas.

The organization of the Texas State Association of Florists was due largely to the efforts and progressive tendencies of Tom Wolfe. In recognition of his worth, he was made a lifetime member and a director of the Society of American Florists. He was also a director in the Florist Telegraph Delivery.

When war was declared on Spain by the United States, in 1898, Tom Wolfe enlisted as a member of the Second Texas, and he was given the rank of quartermaster sergeant. He served until the war ended.

Mr. Wolfe had been a Mason for many years. He belonged to Hella Temple Shrine, Dallas; was a Knight Templar and past exalted ruler of Waco lodge of Elks. Mr. Wolfe was also a Knight of Pythias, a Rotarian and a member of the Lion's club of Waco.

Carl Swenson.

Carl Swenson, aged 66 years, is dead at Winsted, Conn., after a lingering illness. Mr. Swenson, who was born in Sweden, came to this country when 19 years of age, and has been a resident of Winsted for the past twenty-five years. He was one of the best known florists in the state. He is survived by one daughter, Mrs. Walter Fiston; two sisters, Mrs. Peterson of Memphis, Tenn., Mrs. Feaholm of Houston, Tex., and one brother, Jacob Swenson of Chicago.

Society of American Florists and Ornamental Horticulturists

Very satisfactory progress with the campaign fund was made during the week just past, as our list of subscriptions will denote. But such progress must be twice as satisfactory if we are to obtain a consummation of the plans of our committees. There is a large body of florists who have not heeded our many and constant appeals for subscriptions, most of whom have the best of intentions, as is proved when approached by a personal representative.

Just as an instance: On Thursday of last week, A. L. Miller, chairman of the Publicity Committee for Long Island, N. Y., accompanied by Director Joseph A. Manda and Secretary Young, visited the florists located on the south side of the Island and in every case received a subscription. These florists all seemed to be well posted as to the work of the campaign, and its resulting benefits. Mr. Miller is satisfied that everyone in the trade will subscribe when called upon by special representatives. But why wait until a personal call is made, when it is so easy to mail a check to the Secretary? In a few days visits will be made to the florists on the north side of the Island and, without doubt, the same result will be forthcoming.

Some of our representatives are doing laudable work, particularly Guy French, Chicago; Robert Newcomb, West and Northwest; L. J. Reuter, New England; Robert Kift, Philadelphia; A. F. Longren, Chicago, and M. A. Vinson, Cleveland. Our staff of representatives will be materially augmented in the near future.

The Delay in Signs.

To the florists who have experienced delay in the receipt of the glass signs they have ordered we offer the following explanation, taken from a recent letter from the Rodwell Mfg. Co., Buffalo, makers of the signs:

"We have had considerable difficulty for the last six weeks in getting glass, as the glass situation is in very bad shape. The factories only turning out about 50 per cent of their output during the last season has made a shortage of glass and sometimes it takes quite a while to get certain sizes. We placed a contract three months ago for glass and some of it we have not received as yet although

the contract called for all of it to be delivered by July 1st; however, we think that the glass people now have enough to give us some so that we can get a few of your signs ahead to take care of the shipments more promptly."

New Subscriptions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

George W. Keyser, Babylon, L. I.	\$5.00
Chatham Floral Co., Chatham, N. Y.	5.00
Wm. Munt, St. Clair, Mich.	10.00
A. J. Stahelin, Redford, Mich., additional year	50.00
Central Floral Co., Detroit, Mich.	30.00
France & Vandergrift, Monroe, Mich.	10.00
Otto H. Cron, Monroe, Mich.	10.00
Schramm Bros., Toledo O., additional	15.00
Max Spenner, Toledo, O.	25.00
Helmar Flower Shop, Toledo, O.	20.00
S. N. Peck, Toledo, O.	5.00
John Assa, Chicago, Ill.	15.00
J. C. Meier, Morton Groves, Ill.	10.00
Chas. N. Miller & Bro., Morton Grove, Ill.	25.00
St. Adalberts Greenhouses, Niles, Ill.	25.00
T. D. Kefke, Marshfield, Wis.	5.00
W. H. O. Demmler, Eau Claire, Wis.	5.00
N. Dahm, Morton Grove, Ill.	10.00
O. F. Eskil, Iron Mt., Mich., additional	5.00
Beaver Floral Co., Beaver Dam, Wis.	5.00
Edw. W. Schuster, Crookston, Minn., one year	5.00
LeCluse & LeCluse, Blue Point, N. Y.	10.00
The Bool Floral Co., Ithaca, N. Y.	5.00
Neal E. Boyle, Malden, Mass.	5.00
Port Alleghany Greenhouses, Port Alleghany, Pa., one year	5.00
J. A. Tapscott, Owensboro, N. Y.	5.00
Wm. M. Ferguson, Phila., Pa.	10.00
Chas. B. Stahl, Phila., Pa.	25.00
T. Neilson Geiger, Phila., Pa.	10.00
J. C. Rennison Co., Sioux City, Ia.	25.00
Groves Floral Co., Atchison, Kan.	5.00
Adgate & Son, Warren O., one yr.	10.00
John W. Foote, Reading, Mass.	10.00
Leslies Greenhouses, Amesbury, Mass., one year	5.00
Jas. Brown, Jr., Coatesville, Pa., one year	25.00
C. P. Barnard, N. Brook, Pa., one year	5.00
Enos W. Kohr, Lancaster, Pa., one year	15.00
Morale Bros., Rye, N. Y.	15.00
John Sykes, Allentown, Pa.	25.00
Wm. F. Barkham, Ridgewood, N. J.	5.00
Arthur Dummett, Inc., Mt. Vernon, N. Y.	5.00
Wollrath & Sons, Waltham, Mass.	20.00
H. A. Ryan, Inc., Cambridge, Mass., additional	5.00
W. H. & J. C. Ryder, Wantagh, L. I.	25.00
W. C. McCollom, Islip, L. I.	10.00
J. Bennett & Son, Blue Point, L. I.	10.00
Julius Chevaly, Blue Point, L. I.	15.00
Henry Weston, Hempstead, L. I.	25.00
Herman Mamietsch, Rockville Centre, L. I.	10.00
C. R. Ankers, Rockville Centre, L. I.	25.00
M. Matheron, Baldwin, L. I.	25.00
George Peters & Sons, Hempstead, L. I.	50.00
Chas. Fish, Blue Point, L. I.	5.00
John Young & Co., New York City, N. Y.	50.00

Frost & Spence, Greenville, O., one year	5.00
Henry H. Barrow, Whitman, Mass.	10.00
H. Staeps, Elm Grove, Wis.	10.00
Max Fuerning, E. Paterson, N. J.	5.00
W. H. Culp & Co., Wichita, Kan.	10.00
John Scott Estate, Brooklyn, N. Y.	10.00
R. A. Elliott, Morristown, N. J.	25.00
Frank N. Eskesen, Madison, N. J.	10.00
C. P. Dudley, Madison, N. J., one year	10.00
Duckham-Pierston, Madison, N. J.	100.00

990.00

Previously reported..... 39,142.50

Total\$40,132.50
JOHN YOUNG, Secy.

1170 Broadway, New York, N. Y.
July 5, 1919.

MR. BLOSSOM OPENS AN OFFICE.

Mr. Harold Hill Blossom has opened an office for the practice of landscape architecture at 10 Milk street, Boston. Mr. Blossom is a graduate of Amherst College. He received the degree of Master of Arts from Harvard University in 1906 and the degree of Master of Landscape Architecture in 1907, which was the first year this degree was given. Mr. Blossom made a trip to Europe in 1906 for study and on July 1st, 1907, entered the office of Olmsted Brothers, with whom he has been continually connected for twelve years. On the Seattle Exposition work Mr. Blossom was Mr. James F. Dawson's assistant for the last five months previous to the opening of the fair; and a few years later, at the San Diego Exposition, he was the resident representative of Olmsted Brothers.

BOSTON.

The flower market is fairly good, considering that this is the month of July. Prices are of course better than a year ago, but the demand is about the same. Carnations are coming in more slowly, some being good but the average running rather poor. Gladioli are fair in quality and more are coming in daily. There is a miscellaneous lot of other flowers, but they do not sell readily.

Manager Thurston of the Flower Exchange leaves Saturday for a two weeks' vacation at Fair Haven.

P. Welch is spending the summer at Old Orchard Beach, Maine.

The Florists' Association of Boston is having its first annual outing today (Saturday) at Wardhurst, Lynnfield, with a dinner as one of the features.

A runaway automobile broke the plate glass window of Penn's, 124 Tremont street, last week. Several people were somewhat injured.

Myron Ford of East Weymouth, a well known flower grower, is spending a vacation at Lake Winnepesaukee, N. H.

HORTICULTURE

Established by William J. Stewart in 1904

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EDWARD I. FARRINGTON, Editor.
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 Page and half page space, not consecutive, rates on application.

SUBSCRIPTION RATES:

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Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

A chance to help

Apparently considerable interest has been aroused by the article on "What Causes Brown Patches on the Lawn," published in the June 28 number of *HORTICULTURE*.

The material for this article was furnished by the Department of Agriculture at Washington. But it seems that Professors Osborne and W. F. Kraut, of the Massachusetts Agricultural College, Department of Botany, have been working along the same lines. In fact, they issued a paper in 1918 which antedated the work of the Department at Washington. Professor Kraut writes that a great amount of data has been collected at the Amherst Station, with the expectation of publishing a bulletin later. The work is nearly completed, but just now it is desired to make some further tests of the various treatments in the field before publishing results. Professor Kraut is asking for the help of *HORTICULTURE*'s readers. He writes as follows: "I wonder if you could be of assistance to us in locating lawns or putting greens where this disease is found. We are prepared in this state this year to carry on a limited number of experiments, providing we can find a location." The editors of *HORTICULTURE* will be glad to have letters from anyone who is having trouble with brown patches on the lawn, in order that the college may be helped in its experiments.

Floral amenities

There is no better way to advertise than to show your goods, always providing, of course, that they are what you represent them to be. It may be true, quite likely is,

that the American Rose Society was not thinking about advertising when it sent its gift of garden beauties to the American Press Humorists' Association when the latter had their convention in Philadelphia last week, but as a result of what they did the Society and its work have been given a great amount of worth while publicity. At the banquet a corsage bouquet of fifty rosebuds was presented to each of the lady guests by Samuel S. Pennock on behalf of the American Rose Society and with their compliments. The following letter accompanied the donation and was read by the president of the association and received with much applause but with nothing like the joyful glee expressed by the ladies over their roses: "In honor of this auspicious occasion the American

Rose Society takes the liberty of sending its little tribute to the Joyful Geniuses, (who so eternally shed their rays of mirth on a sorrowful world) and in so doing, it takes the opportunity of expressing its appreciation of the many lightsome hours the humorists of America have given each and every one of our members both in sunshine or when the dark clouds of sorrow or adversity have shadowed their lives.

"June is the month of roses and your association has shown that in selecting June as its convention month you have the sublime and joyful spirit in the highest degree and the members of the American Rose Society feel that they also all belong to the same happy family.

"On your part you say it with:

'Quips and cranks
 and wanton wiles,
 Nods and becks
 and wreathed smiles.'

"On our part we say it with roses.

"And so, each in our own little way, we add to the glory of the Creator and the Gayety of Nations.

"We are very glad that we have been given this opportunity to voice our appreciation in a form which we are sure you will all appreciate."

The following poetical and heartfelt acknowledgment was sent by President Alexander in formal acknowledgment of the donation:

Dear Mr. Pennock: July 2, 1919.

We thank you for the kindly thought

That prompted you to send us
 The roses that the sunshine caught
 And used but to befriend us.
 And if we had but ta'en apart
 Each sweet array of posies
 I know we'd find your kindly heart
 Concealed among the roses.

The roses now have east and west
 And north and south far traveled
 And sentiment left unexpressed
 By fate must be unraveled;
 But with the spirit's latitude
 This thought each heart discloses:
 You still may find our gratitude
 Concealed among the roses.

Accept, sir, the sincere appreciation of the ladies of our party and the hearty thanks of the American Press Humorists.
 GRIF ALEXANDER, President.

Another Side of the Early Closing Question

Boston, Mass., July 3, 1919.

Gentlemen:—While we have tried very hard to create shorter hours for our employees we find it a difficult task, especially here in Boston.

Many of our out-of-town customers usually get their orders in late, therefore our place must be opened until the last order is filled. While we are greatly in favor of shorter hours you can readily see above conditions. Many of the out-of-town florists can hardly afford to keep a continual supply of fresh cut flowers, as their orders are usually irregular. When an order comes their way the first thing they do is call up the wholesaler, depending upon him to supply him on short notice. Our motto is to give quick service and prompt attention to all orders. Under present conditions we are unable to do any better. At some future time, when the out-of-town florists will arrange for shorter hours, we will be able to do likewise.

Yours truly,
 HENRY M. ROBINSON & Co., INC.

THE REGAL LILY

By E. H. Wilson, Its Discoverer

The season of the Regal Lily is now at hand. In New England gardens this is the week when this lily holds its court and queens it over other garden beauties. And right worthily does it deserve the sceptre for by the universal consent of all in whose gardens it grows it has no peer in the realm of lilies. Three years had passed since last I saw it in bloom when on full half a million blossoms expanded to the shrine at Roslindale and saw full half a million blossoms expended and more in bud—a witchery of beauty, a dream of delight. The heat of the day was intense yet the lily seemed to be dancing with exuberant joy, like healthful youth on holiday, glorying in the very joy of living. Its cheeriness was infectious and invigorating, and when I finally tore myself away from this gorgeous field I felt almost contented with my lot.

Since its introduction in 1911, it has withstood unscathed the climate

of Boston, has flowered and ripened fruit annually, and has given rise to millions of offspring. No other lily can claim such a record. It is a marvel of hardiness and adaptability.

The narrow, gracefully recurved leaves are singularly attractive and the color combination in the flower exquisite, the pale to wine-rose exterior, the clear canary-yellow throat, the waxy white, lustrous mouth translucent and the rose color reflected as a delicate blush on the interior, the golden yellow anthers with their cohesive pollen, and the viscid, glistening stigma—altogether a picture of rare beauty. Often six to a dozen flowers top a yard high stem which though slender is rigid and tense as steel, and quite frequently each bulb gives rise to two or more stems. The fragrance is agreeable even indoors, and the cheery aspect of the flowers give it additional value for the sick room in home or hospital. Not only is the Regal Lily perfectly hardy but it forces well and there seems no valid reason against its be-

coming the Easter Lily of the future. Where apples will grow this lily will thrive. It loves sunshine, good drainage, leafsoil and loam, but rich manure and chemical fertilizers are fatal.

A PLANT NO LIVING THING WILL TOUCH.

One of the most interesting plants we have in the Atlantic States is the Virginia Wild Ginger. It is found in both the Virginias and as far south as Georgia. There are several other species in the Atlantic States as far south as Florida and northward to Connecticut. The plant grows in very hilly and wooded places, says the American Forestry Magazine and is easily recognized by its kidney shaped leaves and curious purplish brown flowers. These flowers grow one to a stem. No living thing will eat its bitter leaves and you rarely see the flower unless you hunt for it, for they hide themselves out of sight if possible.



ACRES OF REGAL LILIES

There is a keen demand for

FREESIAS

in color, but people have been clamoring for more distinct colors, for larger blooms; the mixed colors did not always please, the flowers were often too small.

Rud. Fischer, the Freesia Wizard of San Gabriel, Cal., has been experimenting with colored Freesias for fourteen years. Under those Southern skies he has been breeding, creating, improving, segregating, discarding, until he had selected from millions of seedlings, a very few exceptionally beautiful types of

wonderful colors and of very large blooms, the stock of which he has been quietly increasing and which he is now ready to put on the market.

For several years we have been negotiating about the sale of his finest creations; we have been watching them with great interest; last Spring we flowered them, through the courtesy of that eminent Horticulturist, Mr. T. A. Havemeyer, in his conservatories at Brookville, L. I., and we are proud that we have finally secured the exclusive sale of the finest creations of Mr. Rud. Fischer. We offer:

FREESIA Fischerii

The incomparably beautiful; the choicest in its color, selected from millions of seedlings; the finest, largest, purest, strongest and most fragrant. \$10.00 per hundred, \$75.00 per thousand.

FREESIA

Mrs. Chas. Hamilton

Selected from many thousands of picked varieties for its beautiful appearance, most pleasing shade of soft, pinkish lavender; the color reaches well down the throat; very large flowers, seven to eight carried on long, stiff stems, holding the flower erect; foliage reaching well up the stem, very fragrant. \$15.00 per hundred.

FREESIA Mrs. Chas. Pike

Remarkably fine, large wide-open flowers, a $\frac{1}{4}$ -inch band of reddish lavender runs around the edge of a white flower; strong grower, stems 18 to 20 inches, standing up well; foliage luxuriant, coming well up the stems. Splendid keeper, from 8 to 10 buds, very fragrant. \$15.00 per hundred.

FREESIA Katherine Watkins

While the flower is not quite so large as the others, it is a Freesia "Par Excellence" for color; beautiful salmon-buff, from 4 to 6 buds open at one time; grows nearly two feet tall, with narrow stiff foliage on wiry stems; is a great keeper, highly fragrant; truly a wonderful flower. \$15.00 per hundred.



LIFE SIZE OF FREESIA FISCHERII

The Wholesale Trade is invited to correspond with us regarding trade prices

John Scheepers, Inc., Flower Bulb Specialists **2 Stone St., New York**

THE GARDENERS' SECTION

THE WORTH OF THE SHOWS.

Ten years ago when I started Hillcrest Farm I was given a bit of advice by one of our leading florists which I did not follow—to put my farm into the hands of some competent gardener for five years and after myself spending that time in sauntering abroad to return to find my gardens made. That advice was not and will not be followed at Hillcrest. For I want the fun of reading the catalogues in winter, of watching the buds start out on the new shrubs in the spring, and of attending the flower shows in the summer, where I learn who is growing better strawberries than we are at Hillcrest, who has their roses fresher for the exhibition or perhaps there is some perennial or fruit which we have not yet grown at Hillcrest.

From Stillman in Westerly, Rhode Island, we have grown some beautiful cactus dahlias, but last summer in Horticultural Hall we saw the Lily Grand grown by Thomas Murphy of Peabody which excelled in size and beauty any white one in our garden. So, of course, we wanted it and are eagerly waiting for it to blossom. It was at the Horticultural Show that I learned there was a perennial aster which blossoms in June. It is now growing in my garden. Mr. Wilson has wandered through Korea and Japan for the beauty of my garden. Some of his plants have come to me through Mr. Farquhar's catalogue, others through the kindness of Professor Sargent and Mr. Vandervort of the Arnold Arboretum. The first time I met Mr. Wilson I almost overwhelmed him by my enthusiasm for it was through his wanderings that the beautiful Montana Rubens clematis had blossomed so wonderfully in my garden that spring.

We cannot all go to Korea, and the memory I brought back from Japan was of fences hung with golden rice zigzagging over the fields, of dramatic scenes in which the actors were made of living chrysanthemum plants, of pine trees drooping their dark green boughs over the gray walls around the Mikado's palace in Tokyo—a wall which suggested our own fruit wall in front of tall white pines at Hillcrest. We cannot all wander through China and Japan, but if the public wants to know about flowers, wants to grow the old ones and the new in their gardens by frequenting the horticultural

shows they will find not only the flowers but the men who know how to grow them.

At half past eight on the days of the shows I start for the farm where my car is filled with the flowers, fruits and vegetables we are to show that day. Then Mr. Mezit, who has charge of growing our vegetables and fruit trees, or Mr. Allen, who is starting what is going to be one of the best preserves of wild flowers in New England, goes with me to Boston, where we have a busy time at Horticultural Hall till twelve o'clock, when all must be labelled and in order for the show. There I learn whether I made a mistake in keeping control of my farm if I want it to grow all that can be grown in vegetables, fruit, berries and flowers in New England. Also I learn what is being done on other farms and gardens.

The Horticultural Society is one of the oldest institutions in Boston. For generations my family has been interested in it. It is my duty as well as my privilege to give it my support. We are all proud of its records. Yet these last few years for various reasons, its exhibitions have not been as good as formerly. For these last five years I have seldom missed an exhibition. I have watched the people at those shows, people coming from hot crowded homes where they struggled to keep a geranium alive, children bringing younger children with them for they had found a sunny place on a roof where they were growing a few vegetables and flowers. These memories are of days before this world's war was fought in Flanders and in France, not only that those countries might be free from the oppression of Germany, but that a greater democracy might prevail throughout the world. We are going through the hard days of reconstruction, days difficult for both labor and for capital, days in which there has been such a demand for the raising of food that there has never been a greater opportunity for our horticultural societies to show what they can do. Yes, it is harder to have the land well filled today when we have to pay over three dollars a day for our labor, than it was when we could get good help for a dollar and a quarter a day, but let us give the men who raise their own flowers and vegetables an opportunity to help us. They have worked hard to

improve their strawberries, to bring their roses to perfection. Let us open the doors of Horticultural Hall to them every Saturday through the summer that they may bring their choicest blossoms to us that we may show them our best fruit and flowers in the feeling of mutual co-operation, in the spirit of democracy for which our young men have laid down their lives for.

"The holy supper is kept indeed;
In what we share with another's need,
Not what we give, but what we share,
For the gift without the giver is bare;
Who gives himself with his alms feeds three,

Himself, his hungering neighbor and me."

M. R. CASE.

Hillcrest Farm, July 2, 1919.

WHEN TO SOW GRASS SEED TO INSURE A GOOD TURF.

Beyond a doubt, as has been proven, late August, all of September, and early October, are the best months (in the latitude of Philadelphia, at least) for the sowing of grass seeds, for any purpose whatsoever. Particularly is this true in the formation of putting greens and fairways.

The idea that the spring months only are suitable is rapidly being superseded by the newer practice, which is, and has been, working out very well.

Probably the chief good reasons, if there are no others, for late summer and autumn sowing, are the facts that the nights are cooler—and there is a certain amount of natural moisture furnished by heavy dews if there are no rains. Further, the growth of weeds and other undesirable plants is practically over at that season, which is an important factor in the elimination of a poor turf. Again, the spring months are busy times for all other kinds of work, and it is not always possible to devote the care to preparing the ground for putting down a permanent grass, which is available later on.

Most of the large undertakings now for grass seed sowing are done at the time recommended above. It is frequently thought that the approaching winter has a serious effect upon the young grass, but as a matter of fact, this is not generally so. The more snow we have, the better.

Grass established in the late sum-



A View at Sunnybrook Golf Club, Chestnut Hill, Pa. Grounds Sown Extensively with Michell's Grass Seeds

Michell's Recleaned Grass Seeds

For Putting Greens, Fairways, Bunkers and Teeing Grounds, and in fact for every purpose, are immediately recognized by authorities to be of a superior quality.

Many varieties of grass seeds are short in supply—better cover your wants now. August, September and early October are the right times to sow grass seeds.

Write for illustrated large catalog and list of satisfied golf club clients.

MICHELL'S SEED HOUSE,

MARKET STREET
PHILADELPHIA

mer or autumn will start its rapid growth early in the spring; long before you could think of getting the seed sown if it were left until that time. The time as advised above will gradually replace all others for sowing seasons.

J. F. BRADLEY.

SWEET PEA SHOW AT BOSTON.

The Sweet Pea Show at Horticultural Hall, Boston, Saturday and Sunday, aroused considerable interest.

AWARDS FOR FLOWERS—John Allen French Fund—Sweet Peas—Twenty-five sprays, any white variety: 1st, Wm. G. Taylor, Constance Hinton; 25 sprays, any crimson or scarlet: 1st, Wm. G. Taylor, King Edward; 25 sprays, any deep pink: 1st, Wm. C. Taylor, Hercules; 25 sprays, any lavender: 1st, Wm. G. Taylor, Florence Nightingale; 25 sprays, any purple: 1st, Wm. G. Taylor, Royal Purple; 25 sprays, any other color: 1st, Wm. G. Taylor, King Manuel; best vase, white, 12 sprays to a vase: 1st, Wm. G. Taylor, Constance Hinton; best vase pink: 1st, Wm. G. Taylor, Hercules; best vase lavender: 1st, Wm. G. Taylor, Florence Nightingale; best vase scarlet: 1st, Wm. G. Taylor, King Edward;

best vase, any other color: 1st, Wm. G. Taylor, King Manuel. Iris Kaempferi—collection of not less than six varieties, filling 25 vases: 1st, Miss Cornelia Warren. Hollyhocks—24 blooms, not less than 4 varieties: 1st, Miss Cornelia Warren; 2d, Wm. C. Winter. 12 spikes: 1st, Clifford W. Walker; 2d, Faulkner Farm. Collection of wild flowers, named: 1st, Hillcrest Farm; 2d, Mrs. F. C. Upham.

Gratuity: E. A. Clark, Larkspur and Gladiolus.

AWARDS FOR FRUITS—Benjamin V. French Fund, No. 2—Cherries—Any red variety, 96 specimens: 1st, Hillcrest Farm; 2d, Faulkner Farm. Any black variety, 96 specimens: 1st, Mrs. R. Goodnough; 2d, Faulkner Farm. Any white or yellow variety, 96 specimens: 1st, Mrs. M. J. Merrill; 2d, Faulkner Farm. Currants—Three varieties, 48 clusters each: 1st, John Bauernfeind. One variety, 48 clusters: 1st, John Bauernfeind. Gooseberries—Three varieties, 48 berries each: 1st, John Bauernfeind; 2d, Wm. C. Winter. Any white or yellow variety, 48 berries: 1st, John Bauernfeind; 2d, Wm. C. Winter. Raspberries—Four varieties, 48 berries each: 1st, Hillcrest Farm. Any red variety, 96 berries: 1st, John Bauernfeind; 2d, Mrs. R. Goodnough.

Gratuity: Mrs. R. Goodnough, basket of small fruits.

AWARDS FOR VEGETABLES—John A. Lowell Fund—Beans—String, 50 pods: 1st, Faulkner Farm, 2d, Hillcrest Farm. Carrots—Any variety, 12 specimens: 1st and 2d, Hillcrest Farm. Peas—Any variety, 50 pods: 1st and 2d, E. A. Clark. Potatoes—Any variety, 12 specimens: 1st, Hillcrest Farm, Uncle Gideon; 2d, the same for Early Ohio. Tomatoes—Any variety, 12 specimens: 1st, Faulkner Farm, John Baer; 2d, the same for Carter's Sunrise. Collection of Vegetables—8 varieties: 1st, Hillcrest Farm. Collection of Vegetables—4 varieties: 1st, James A. Neal; 2d, E. A. Clark.

Gratuity: Faulkner Farm, collection of ten varieties of tomatoes.

AMERICAN GLADIOLUS SOCIETY.

The tenth annual meeting and exhibition of the American Gladiolus Society will be held in the Arcadia auditorium, Detroit, Mich., during the convention of the Society of American Florists, August 19-21. It is expected that there will be a large attendance, as much of interest is to be presented. The gladiolus is constantly growing in popularity and there is no reason why the society should not take in many new members.

Penn
The Florist

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EAST ORANGE, N. J.

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We deliver by automobile in East, West
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Towns for Ready Reference. Orders
transferred by telegram or otherwise
to any of the firms whose address is
here given will be promptly and prop-
erly filled and delivered.

Albany, N. Y.—Danker.

Boston—Thos. F. Galvin, 1 Park St.

Boston—Penn the Florist, 124 Tremont St.

Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.

Buffalo, N. Y.—S. A. Anderson, 440 Main
St.

Buffalo, N. Y.—Palmer's, 304 Main St.

Chicago—William J. Smyth, Michigan
Ave. and 31st St.

Cleveland, O.—J. M. Gasser Co., Euclid
Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Kneble Bros., 1836 W. 26th
St.

Cleveland, O.—The Smith & Fetzers Co.,
735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643
Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

East Orange, N. J.—Smith, The Florist.

Fall River, Mass.—Warburton, 406 New
Boston Rd. and 38 N. Main St.

Kansas City, Mo.—Samuel Murray, 1817
Grand Ave.

New Bedford, Mass.—Murray the Florist,
232 Union St.

New York—David Clarke's Sons, 2130-
2141 Broadway.

New York—A. T. Bunyard, 413 Madison
Ave., at 48th St.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swededa, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. E. Pier-
son Co.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—Randall's Flower Shop,
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ARNOLD ARBORETUM NOTES.

Rosa multibracteata is one of the last of the new Chinese Roses to flower. It is an attractive plant with small leaves and small flowers in clusters, the clear pale pink petals being deeply notched at the apex. Vigorous young shoots of this Rose are thickly covered with bright red prickles and greatly add to its beauty at the time when it is in flower.

Rosa gallica var. officinalis is flowering for the first time in the Arboretum. It is one of the Province Roses and is sometimes called Rosa provincialis. The large, handsome, partly double red flowers are more fragrant than those of most modern Roses. This Rose is common in several old gardens in the town of Medfield in this state. No one now knows when and by whom it was brought there. It has long been known in French gardens, and there is a beautiful picture of it by Redoute in his great work on Roses published in Paris more than a century ago. There is a form of this Rose with paler-colored flowers which is growing in a garden in Weston in this state which was brought from New Hampshire where it is said to be common in old gardens. Tradition credits the Huguenots with having brought this Rose to America.

Tripterygium Regellii is flowering well again this year in the Shrub Collection and on Hickory Path near Centre Street. It is a near relative of the

Bitter Sweet (Celastrus) and a native of Japan and Korea. It is a half climbing shrub with stems sometimes forty or fifty feet long in its native countries, large, long-pointed, dark green leaves, and small white flowers in great terminal clusters which are followed by three-lobed and three-winged fruits. This plant flowered in the Arboretum when not more than three feet high. The small plants have erect, self-supporting stems, but large plants will need the support of trees, shrubs or rocks over which to stray. This hardy shrub is well suited for covering rocky banks or hillsides in our northern states.

Rhododendron (Azalea) viscosum, which is the latest of the Azaleas to flower in the Arboretum, is in bloom. It is a common plant in the swamps of southern New England where it is usually known as "Swamp Honeysuckle." The small, pure white, clammy flowers which continue to open during several weeks are hidden by the new shoots of the year which are often fully grown before the first flowers open, and the great value of this Azalea is found in the fragrance of the flowers which makes the neighborhood of an Azalea swamp delightful. Although it grows naturally in swamps, this Azalea grows equally well transferred to a garden border or to a hillside, as on Azalea Path in the Arboretum where many of these plants are now covered with flowers.

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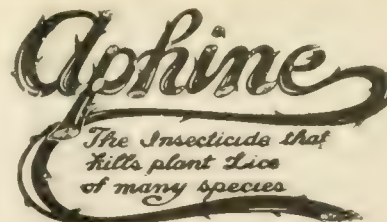
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THE DETROIT CONVENTION OF THE S. A. F. AND O. H.

Preparations for the Detroit convention, August 19, 20 and 21, are approaching completion. Everybody concerned is more than satisfied with the prospects for a successful gathering, and a bumper attendance is already assured. The trade exhibition promises particularly well, most of the exhibition space has been reserved, and it is more than likely that the balance will be disposed of long ahead of the convention. Secretary Young will be in Detroit about July 20, and will remain there until the close of the proceedings.

The following are among those who have engaged space in the Trade Exhibition:

Pittsburgh Cut Flower Co., Pittsburgh, Pa.; The McCallum Co., Pittsburgh, Pa.; Kroeschell Bros. Co., Chicago; Jackson & Perkins Co., Newark, N. Y.; Kanawha Mfg. Co., Chicago; Benj. Hammond, Beacon, N. Y.; Poehlmann Bros. Co., Chicago; Gnatt Co., LaPorte, Md.; S. S. Penneck Co., Philadelphia; American Bulb Co., Chicago; Duro Paper Products Co., Chicago; J. G. Neidinger Co., Philadelphia; Alex Henderson & Co., Chicago; Burlington Willow Ware Shops, Burlington, Ia.; Allan N. Humason, Chicago; Foley Greenhouse Mfg. Co., Chicago; Vaughan's Seed Store, New York-Chicago; American Greenhouse Mfg. Co., Chicago; Wertheimer Bros., New York; John A. Evans Co., Richmond, Ind.; Henry A. Dreer, Inc., Philadelphia; M. Rice Co., Philadelphia; Schloss Bros. Ribbons, Inc., New York; Robert Craig Co., Philadelphia;

H. Bayersdorfer Co., Philadelphia; Lion & Co., New York; H. F. Michell Co., Philadelphia; Skinner Irrigation Co., Troy, O.; Lord & Burnham Co., Chicago-New York; Ionia Pottery Co., Ionia, Mich.; Cohen & Hiller, New York; B. Hammond Tracy, Inc., Wrentham, Mass.; Joseph Heacock Co., Wyncote, Pa.; Hitchings & Co., Elizabeth, N. J.; A. L. Randall Co., Chicago, Ill.

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Copies of any of these patents can be obtained by sending fifteen cents in stamps to Siggers and Siggers, patent attorneys, Box 9, N. U. Ins. Bldg., 918 F St., N. W., Washington, D. C., by mentioning **HORTICULTURE**:

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- 1,307,383. Plow-Tractor, Stop Draft-Gear. Benjamin Umbower, Royer, Pa.
- 1,307,408. Plow. Andrew Jackson Marshall, Richmond, Tex.
- 1,307,672. Automatic Cultivator Attachment for Plows. Oliver Warren Johnson, Cleveland, Ohio.
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- 1,307,795. Draft Adjustment for Plows. Eugene S. Smith, Pittsburg, Kans.
- 1,307,918. Plow. Alexander Mitchell, Pueblo, Colo.

ORIGIN OF THE GREENHOUSE.

Like everything else, the modern greenhouse is a product of evolution, says Harold A. Caparn, in the June number of *Architecture*. It began in the seventeenth century under the form of glazed frames set in front of a wall on which fruit trees were trained to keep the sun's light and heat within. Also, later, to conserve the heat of a flue within the wall. Then it became a room with windows for the storage of plants in winter like the orangeries at Versailles and elsewhere. Gradually the windows grew larger, but even up to the beginning of the nineteenth century a roof was considered unnecessary, as it was believed that glass overhead would allow the artificial heat within to escape. As soon as it was discovered that the roof could be glazed as well as the sides without undue loss of heat, the modern greenhouse came into being, the supports diminished to the minimum required to support the glass and, as might be expected, the latest thing in glass houses is a steel frame with the lateral supports almost suppressed, and with even bent panes of glass replacing the old fashioned eaves. Thus the greenhouse has continually travelled further from the architecture from which it first arose.

SWEET PEAS UNDER GLASS.

By William Sim.

Sweet peas are being taken up by many new growers who are looking for accurate information about the best ways in handling peas. Mr. William Sim is recognized as one of the best growers in the country, for which reason the facts about his methods as given in the *American Sweet Pea Bulletin* should prove valuable. Mr. Sim says: Seeds may be planted if the house is ready, directly where they are to grow. This is the best practice. If the house is not ready they may be sown in beds and transplanted or sown in pots and transplanted. In sowing the seeds we use a marker $2\frac{1}{2}$ inches deep and $2\frac{1}{2}$ inches apart; this is made about 12 feet long so that a row can be marked off in a few minutes. One seed is dropped into every hole and the soil pressed together over the seed. It is essential, if good Sweet Peas are desired, that the plants should be grown the greatest length of time at as low temperature as possible until near the period when you wish the plants to bloom, when it will be necessary to increase the temperature in order to produce color and have the plants hold their buds. What seems to trouble most growers are mildew, aphids, red spider, bud drop and method of staking.

Mildew is brought on through improper ventilation and manipulation of the steam pipes. From observations, mildew always starts in the house where the air is dead in the two corners where the steam supply enters. The headers of the steam coils being located there, an undue amount of heat is given off at all times, unless these are thoroughly insulated. Once the mildew starts in corners, and the house gets into a wet, clammy condition, the fungous spreads over a whole house in less time than it takes to write these lines. I have never used anything for a remedy, believing that prevention was a better course than trying to cure, and have not been troubled to any extent with it.

Aphis will appear, and unless held in check will soon ruin a crop. We have used, for many years, fumigating tobacco dust, "Killm Dead" brand. As soon as aphis shows itself we give the house what we call a double dose, that is, two applications the same night, giving the first at dusk and the other about 10 to 11 o'clock. This keeps the smoke in the house the whole night and will kill most of the aphids. On the following night we give a single dose, setting off at dusk. In a house 41 feet wide we use three rows of 12-inch pie plates, placed every 8 feet

apart for a double dose and 16 feet apart for a single dose. We cover the bottom of plate with 1 inch of tobacco dust, making the center slightly conical. In setting the dust off we use an ordinary oil can filled with wood alcohol. We light the end of the spout and squirt a few drops of the flaming liquid into the dust, which will commence to burn a very little.

CHICAGO TO DETROIT.

The Wabash railroad has been chosen for the trip of the Chicago Florists' Club and friends to the annual convention of the Society of American Florists at Detroit, Mich., August 19-21. Special Pullman sleepers for the exclusive use of the party will be in Wabash train 12 leaving Dearborn station, Dearborn and Polk streets, Monday, August 18, at 11.25 p. m., due Detroit the following morning at 7.50 o'clock.

The fare one way, tax included, is \$8.82. Pullman fares are: Lower berth, \$2.16; upper berth, \$1.73; seat, \$1.08.

Delegations from the north, south and west are invited to join the party at Chicago.

MICHAEL BARKER,

Chairman Transportation Committee,
Chicago Florists' Club.

COMING EXHIBITIONS.

August 9-10, Boston, Mass.—Exhibition of gladioli and phlox by Massachusetts Horticultural Society. Wm. P. Rich, secretary, Horticultural Hall, Boston.

September 9-11, Hartford, Conn.—Fall flower show of the Connecticut Horticultural Society. Alfred Dixon, secretary, Wethersfield, Conn.

September 11-14, Boston, Mass.—Dahlia, fruit and vegetable exhibition of the Massachusetts Horticultural Society. Wm. P. Rich, secretary, Horticultural Hall, Boston.

September 16-17, Ardmore, Pa.—Exhibition of dahlias, outdoor cut flowers and vegetables of the Pennsylvania Horticultural Society. David Rust, secretary, 606 Finance Building, Philadelphia.

September 18-19, Providence, R. I.—Dahlia show of the Rhode Island Horticultural Society. E. K. Thomas, secretary, Kingston, R. I.

September 23-25, New York—Dahlia exhibition under the auspices of the American Institute of the City of New York and the American Dahlia Society at the Engineering Society building, 25-33 West 39th street. Wm. A. Engle-son, secretary board of managers, 322 West 23rd street, New York.

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Circulars and other information will be mailed on application.

The New York Botanical Garden

Bronx Park NEW YORK CITY

NEW ROSES FOR REGISTRATION.

The following roses have been offered for registration in the American Rose Society, and have been approved by the Rose Registration Committee. Unless objections are received within three weeks of the date of this publication, the registration will become permanent:

Rosa Hybrida Max Graf.

Parentage: Probably a cross between *Rosa rugosa* and *R. setigera*.

Description: Habit of plant, bushy and climbing. Character of foliage, glossy, resembling *Rosa rugosa*. Freedom of growth and hardiness, a free grower and exceptionally hardy. Flower, bright pink with golden centers; single, a profuse bloomer. Petalage, like *Rosa rugosa*.

The rose is similar to *rugosa* and *setigera*, but is different in rarely producing seed, and is superior for its foliage which is seldom attacked by insects and attractive throughout the entire season; excellent for planting in mass effects or for a pillar.

Introduced by James H. Bowditch

Frank W. Dunlop.

Class: Hybrid Tea.

Parentage: Seedling of Shawyer × Russell.

Description: Habit of plant, strong, vigorous. Character of foliage, dark, glossy green. Freedom of growth and hardiness; strong grower, free from black spot. Flower, large, rose pink, with a solid high-built bud. Fragrance, strong.

Petalage: 45 petals well reflexed. Freedom of bloom and lasting quality; very free and a good keeper.

Introduced by John H. Dunlop, Richmond Hill, Ontario, Can.

Mrs. Sterling.

Class: Hybrid Tea

Parentage: Antoine Revoire × unnamed pink seedling.

Description: Habit of plant, strong, vigorous. Character of foliage, large and luxuriant. Freedom of growth and hardiness; free-growing, hardy variety. Flower, large, clear rose pink, fragrant bud with full petalage of good substance. A free bloomer, with good lasting qualities.

Introduced by John Cook.

Glorified LaFrance.

Class: Hybrid Tea.

Parentage: Frau Karl Druschki × Russell.

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Advertisements in this Department, Ten Cents a Line, Net

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Strong Field Grown L. I. Carnation Plants. Ready August 15. Orders being booked now; Order Now to be sure of them. Enchantress, White Enchantress, Enchantress Supreme, Matchless, Alice, Beacon, Alma Ward, first size \$12 per 100; second size \$10 per 100.

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Celery: Golden Self-blanching, White Plume, Winter Queen, Giant Pascal, \$2.00 per 1,000. Cabbage: Danish Ballhead, Late Flat Dutch, \$1.50 per 1,000.
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DAHLIAS

Peony Dahlia Mrs. Frederick Grinnell.
\$10.00 per clump. Cash with order.
JOHN P. ROONEY, New Bedford, Mass.

Description: Habit of plant, extra strong grower. Character of foliage, medium. Freedom of growth and hardiness, free, but not very hardy. Flower, large to very large, silvery pink, fragrant. Petalage, unusually full and heavy. Freedom of bloom and lasting qualities, medium and very good.

The rose is similar to LaFrance, but is different in having a much larger flower, is deeper pink, and is superior to LaFrance because of its very long stem and deeper pink, large flowers.
Introduced by John Cook.

Pink Beauty.

Class: Hybrid Tea.

Parentage: Ophelia × My Maryland.

Description: Habit of plant, strong, vigorous grower. Character of foliage, strong and heavy. Freedom of growth and hardiness, very free and hardy. Flower, medium in size, clear pink, fragrant, bud long-pointed. Petalage, full. Freedom of bloom and lasting qualities, very free and lasting.

Introduced by John Cook.

DAHLIAS

New Peony Dahlia—John Wanamaker, Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to **PEACOCK DAHLIA FARMS, Berlin, N. J.**

KENTIAS

Kentia Belmorean—Averaging 3 and 4 leaves, good strong plants out of 2½-inch pots at \$15 per 100—larger quantities on application. **J. H. FIESSER, 711-741 Hamilton Ave., North Bergen, N. J.**

PEONIES

Peonies. The world's greatest collection, 1200 sorts. Send for list. **C. BETSCHER, Canal Dover, O.**

SPHAGNUM MOSS

Live Sphagnum moss, orchid peat and orchid baskets always on hand. **LAGER & HURRELL, Summit, N. J.**

VINES

Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. **J. H. TROY, Mount Pleasant Nursery, New Rochelle, N. Y.**

WIRE WORK

WILLIAM E. HEILSCHER'S WIRE WORKS, 264 Randolph St., Detroit, Mich.

FOR SALE

FOR SALE.—2 greenhouses 100 x 25, with or without 4 acres land, inside 30 days. **M. L. TIRRELL, 105 Randolph, Mass.**

Mrs. John Cook.

Class: Hybrid Tea.

Parentage: Ophelia × three unnamed seedlings.

Description: Habit of plant, unusually strong grower. Character of foliage, large and leathery. Freedom of growth and hardiness, very free. Flower, white, suffused with delicate pink, large, deep cup-shaped, fragrant, bud long-pointed. Petalage, large, waxy. Freedom of bloom and lasting qualities, unusually free and lasting.

Introduced by John Cook.

Panama.

Class: Hybrid Tea.

Parentage: Frau Karl Druschki × unnamed pink seedling.

Description: Habit of plant, strong grower. Character of foliage, heavy. Freedom of growth and hardiness, strong grower and very hardy. Flower, large, silvery pink, cup-shaped, fragrant, bud long-pointed. Petalage, large, medium double. Freedom of bloom and lasting qualities, free and lasting.

Introduced by John Cook.

THE BOILER OF Unequalled Fuel Economy

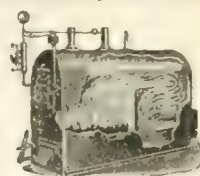
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.



Today is the day to place your order for Sash Operating Device or Greenhouse Fittings which you are in the market for. Prices are going to remain unchanged and we are The Concern that has the right goods at the right price. Write us today for further information.

ADVANCE CO.
Richmond, Ind.

WE ARE SPECIALISTS IN GREENHOUSE GLASS

Free from Bubbles
Uniform in Thickness

PAINTS and PUTTY

Greenhouse White (Semi-Paste) The
Paint Particular Florists Prefer

It will pay you to get our estimates.

THE DWELLE-KAISER CO.

251 Elm Street BUFFALO, N. Y.

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'and Copyrights

Difficult and rejected cases specially solicited. No misleading inducements made to secure business. Over 30 years' active practice. Experienced personal, conscientious service. Write for terms. Address

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WATERER'S SUPERIOR GRASS SEED MIXTURES

We devote very great care in preparing mixtures of grasses, and we are perfectly convinced of their superiority, owing to the yearly increasing demand and the many unsolicited testimonials received. Mixtures of grasses to order of any formula furnished. No charge for mixing.

LAWN GRASS SEED

Waterer's "Special" Evergreen Lawn Mixture

This is the very finest mixture that can be made, and should always be used where a very fine lawn is wanted. It is composed of a combination in proper proportions of the best natural lawn grasses, so as to produce a continuous good lawn from early spring until late in the fall, and the ingredients are the highest grade of re-cleaned seeds only.

Waterer's "Popular" Evergreen Lawn Mixture. In this mixture the quantities of some of the more expensive grasses are reduced or left out in order to bring the price down to a moderate figure.

Waterer's Mixture for Shady Places. A mixture of grasses best adapted for sowing in shady places, where other grasses will not thrive.

Waterer's Putting Green Mixture. A mixture of extra fine grasses that will make a close, firm, green and lasting turf.

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Waterer's Polo Ground Mixture. A mixture of fine-leaved and deep-rooting grasses, forming a strong and lasting turf that will stand hard usage.

Waterer's Permanent Pasture Mixture. Containing only the most suitable grasses that will afford an abundant and nutritious food supply for stock.

Chairmen of Committees on Golf Clubs, etc., are invited to write us for advice and estimates on any work they want done. August, September is an ideal time to sow but write now as the finer grass seeds are in short supply. This applies also to Estate Superintendents and others. Write us now.

HOSEA WATERER

107-109 SOUTH SEVENTH
STREET

PHILADELPHIA

In Writing to Advertisers kindly mention Horticulture

HORTICULTURE

Vol. XXX

JULY 19, 1919

No. 3

ROSES

OWN ROOT, 3-INCH, \$15.00 PER 100
\$140.00 PER 1,000

- 2000 CECILE BRUNNER
- 1200 HADLEY
- 1000 COLETTE MARTINET
- 4000 WHITE KILLARNEY
- 2000 DBL. WHITE KILLARNEY
- 2200 KILLARNEY BRILLIANT
- 3000 MRS. AARON WARD

A. N. PIERSON, Inc.
CROMWELL, CONN.



GLADIOLI

Some of the older ones, but mostly of the newer and better kinds — Halley, Myrtle, Schwaben, Sunbeam, and varieties of that kind, splendid well grown stock.

\$6.00, \$8.00 and
\$10.00 per 100

Everything in
Cut Flowers, Plants, Greens,
Ribbons and Supplies

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7 A. M. to 4 P. M.

S. S. PENNOCK COMPANY

The Wholesale Florists of Philadelphia

NEW YORK
117 W. 28th St.

PHILADELPHIA
1608-1620 Ludlow St.

BALTIMORE
Franklin & St. Paul Sts.

WASHINGTON, 1216 H St., N. W.

Winter-Flowering Roses

We still have left about five thousand **ROSALIND** (Glorified *Ophelia*). This is much darker than the original *Ophelia*. Buds are bright coral, which changes to a clear pink when flowers are developed. One of our best sellers. Strong plants, 3½-inch pots, \$30.00 per 100.

We can supply, also, the following varieties in more or less limited quantities as long as unsold, strong plants from 3½-inch pots:

COLUMBIA and MRS. CHARLES RUSSELL.....	100
SILVIA (Yellow <i>Ophelia</i>).....	\$40.00
FRANCIS SCOTT KEY, WHITE KILLARNEY, KILLARNEY BRILLIANT, HOOSIER BEAUTY, SUNBURST, and MIGNON, or CECILE BRUNNER.....	30.00
	25.00

FERNS

We have a splendid lot of ferns for immediate shipment, in the following varieties and sizes:

<i>Nephrolepis elegantissima</i> , <i>Elegantissima Compacta</i> , <i>Muscosa</i> and <i>Superbissima</i> , 3½-inch pots.....	\$.35 each
Dwarf Boston, 3½-inch pots.....	.25 each
<i>Elegantissima</i> , <i>Elegantissima compacta</i> , <i>Superbissima</i> Dwarf Boston, and <i>Scottii</i> , 6-inch pots.....	.75 each
<i>Muscosa</i> and <i>Smithii</i> , 5-inch pots.....	.75 each
<i>Smithii</i> , 6-inch pots.....	1.00 each
<i>Elegantissima compacta</i> , 8-inch pots.....	2.00 each
<i>Elegantissima</i> , and <i>Elegantissima compacta</i> , 10-inch pots.....	4.00 each
<i>Harrisii</i> , 8-inch pots.....	2.00 each
Dwarf Boston, 8-inch pots.....	1.50 each

LARGE SPECIMEN HYDRANGEA

FOR JULY AND AUGUST FLOWERING

Mme. E. Mouillere and Otaksa. Extra large specimens, grown in half barrels; 4 to 4½-ft. spread, well budded, just beginning to show color. \$15.00 to \$25.00 each according to size.

F. R. PIERSON, Tarrytown, N. Y.

Geraniums

We have a fine lot of 2-inch stock for immediate shipment, and are also booking orders for next season at the current price of **\$2.75 per 100, \$22.50 per 1,000**, in a good assortment of popular kinds such as **S. A. Nutt, Edmund Blanc, Mad. Racamier, General Grant, etc.**, also a good assortment of singles which will make good winter blooming stock.

Hardy English Ivy

2-inch, \$2.50 per 100, \$22.50 per 1,000

FERNS

Boston and *Scottii*, 5-inch pot grown at **\$4.80 per dozen, \$35.00 per 100**, shipped without pots.
Table Ferns, assorted 3-inch, **\$6.00 per 100.**

Cash With Order.

R. Vincent, Jr., & Sons Co.

WHITE MARSH, MARYLAND

CYCLAMEN PLANTS Farquhar's Gold Medal Strain

Strong Plants in 3½ in. pots, \$25.00 per 100
Trade Price on Application

R. & J. FARQUHAR & CO. - - BOSTON, MASS.

IF in need of RELIABLE NURSERY STOCK

that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**

Wholesale and Retail

NORTH ABINGTON, MASS.

BOBBINK & ATKINS

NURSEYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's Fund for Market Development, also "Say It With Flowers" Publicity Campaign.

A Card This Size

Costs only 90c. per Week
on Yearly Order

It would keep your name and your specialty before the whole trade.

A half-inch card costs only 45c. per week on yearly order.

We are Headquarters for the **BEST OF EVERYTHING**
IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc., 166 Chamber of Commerce Bldg., Boston, Mass.

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Careful Seed Growers and Seed Distributors for One Hundred Years

WRITE FOR OUR 1918 SPECIAL CATALOGUE
To Market Gardeners and Florists

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BURNETT BROS. Seeds, Bulbs, Plants Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

W. E. MARSHALL & CO. SEEDS, PLANTS AND BULBS Horticultural Sundries

166 W. 23rd St., NEW YORK

GARDEN SEED

BEST, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

S. D. WOODRUFF & SONS
82 Dec St., NEW YORK and ORANGE, CONN.

Register your name for our
Wholesale Catalogue of
**FRENCH AND HOLLAND
BULBS**

Ready Shortly

Also PERENNIALS for FLORISTS,
ask for Special Prices.

J. M. THORBURN & CO.

53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON

SPECIALIZE IN

SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or
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Only Address, **LANGPORT, Eng.**

FREESIA PURITY

IMPROVED

	Per 1000
¾ to 1 inch.....	\$6.00
½ to ¾ inch.....	9.50
Mammoth Bulbs, ¾ to 1 inch.	15.00
Large Jumbo Bulbs, ¾ inch...	18.00

AMERICAN BULB CO.

172 W. Wabash Ave., CHICAGO, ILL.

Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds.

Improved styles in Implements
Catalogue upon application.

16 So. Market Street
BOSTON, MASS.

When writing to advertisers kindly
mention **HORTICULTURE**

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

When writing to Advertisers kindly mention **Horticulture**

RAMBLING OBSERVATIONS OF A ROVING GARDENER

RAMBLING OBSERVATIONS OF A ROVING GARDENER.

I noticed an item in the American Florist which says: "Chicago is soon to have on the outskirts of the city the most beautiful and extensive botanic garden and arboretum in the world." It is interesting to learn of this new undertaking, and if, as is likely, two thousand acres from the Palos Preserve district be chosen for the site, there will be ample opportunity for unlimited development. But I question the use of the word "soon" in the above quoted statement. An arboretum is not to be made in a day. It takes years for trees to grow, and any attempt to make such an institution in a hurry will surely fail. However, a comprehensive plan is being evolved, and in the site selected the city has a splendid nucleus, with deep wooded ravines, high bluffs overlooking the Desplaines river valley, and great stretches of green prairie.

It is a matter for congratulation to find a general disposition in all parts of the country to develop garden spots of this kind, which shall prove educational as well as merely beautiful. It is in line with the plan of establishing municipal rose gardens now finding favor.

Women gardeners at Kew have had their day. A year ago nearly forty of them were employed in the greenhouses and the flower gardens. Less than a dozen now remain, having been replaced by the journeyman gardeners returning from the war, or by other men who have applied for positions. It would be interesting to have a report as to the quality of service which the women gave. There seems to be a disposition on the part of women gardeners in this country to seek greenhouse work, and some growers have declared that the women are more satisfactory in many ways than the men. I know of one private estate where a young woman has been employed in the greenhouses for nearly two years, and whose work is giving great satisfaction to the head gardener. At the same time I do not anticipate much likelihood that this tendency will go very far.

The other day I saw a long border of common Speedwell which really looks very attractive. As a rule, though,

this plant is hardly worth a place in the hardy border, especially if used in patches. It is not to be compared with *Veronica subsessilis*, which although a little later has much finer color and larger flowers. This *Veronica* is a true blue, and most impressive where planted in masses. I am waiting somewhat impatiently to see the first flowers of the variety Blue Ridge, which is said to be an improvement over *subsessilis*. I must confess, though, that these so called improvements sometimes fail to measure up to the catalogued description. Take Perry's variety of *Anchusa*, for example. If it has any greater value than the Dropmore variety, I have not discovered it. Truth to tell *Anchusa* is not a very easy plant to place. One landscape architect of wide experience tells me that he makes but little use of it because of its awkward habit.

A plant not often seen in perennial gardens, but one which it seems to me is deserving much wider planting is *Cimicifuga*, which is blooming at the present time, its tall slender spikes being held far above the foliage which bears some resemblance to that of *Asilbe*. This is a plant which does not need to be massed to look well. It is attractive scattered here and there through the border, and doesn't clash with anything else.

There has been some discussion about good plants to associate with peonies in order to give blooms later in the season. This season I have noticed *Lythrum* used in that way, and the combination seems to be a good one. The loosestrife is in flower within a few weeks after the peonies pass, and continue for a long time. Strangely enough this good perennial is seldom found in small gardens, although it will adapt itself to almost any situation except one which is very dry, and requires but little attention. Its light purple flowers are not too brilliant for a mid-summer setting, and they have a long season. Perhaps there is a general impression that the loosestrife will only thrive on the banks of bogs or along streams. To be sure, it looks particularly well in such situations, as may be seen by a visit to the Arnold Arboretum just now, but it does not require such a location by any means, growing and blooming for years in ordinary garden soil.

CHRYSANTHEMUM GALL FLY WORKS WHILE YOU SLEEP

After completing the study of the habits and seasonal history of the chrysanthemum gall fly or midge, the entomologists of the United States Department of Agriculture say that growers either must use nicotine sulphate as a spray or do some night work if they expect to prevent the damage done in florists' greenhouses by this pest.

The gall fly was not a pest in greenhouses in the United States until two or three years ago, but now it has been reported by a number of "mum" growers scattered over a wide area in this country. It causes unsightly galls on the leaves of chrysanthemums and curls or crumples them, thus reducing the vigor of the plant. This in turn affects the size, color, and beauty of the bloom. Consequently the "mum" grower receives less for his flowers on the market.

Two ways have been found to eliminate the gall fly—burning tobacco paper in the greenhouses and spraying the plants with nicotine sulphate.

The entomologists have found that fully 95 per cent. of the gall flies emerge from the galls as adults after midnight. Consequently where tobacco stems are burned as a means of control, the work must be done after midnight, since the fumes are effective for only a few hours, due to leakage. Most greenhouse men have been in the habit of fumigating about 6 o'clock in the evening. This practice is not effective against the chrysanthemum gall fly unless the house is absolutely tight. However, where nicotine sulphate is sprayed on the plants, the work may be done in the late afternoon or early evening. This application should be repeated every second or third day for a period of a month or more.

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden
Bronx Park NEW YORK CITY

FERNS

	Per 100	Per 1000
BOSTONS 2 1/4 inch	\$6.00	\$50.00
ROOSEVELTS	6.00	50.00
WHITMANI	6.50	55.00
WHITMANI COM- FACTA	6.50	55.00
VERONA	6.50	55.00
TEDDY, JR.	6.50	55.00

Stock all sold until June 1st.

Order either direct or through
S. S. Skidelsky & Co., Sole Agents
Philadelphia, Pa.

HENRY H. BARROWS, WHITMAN, MASS.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

SEED OF

Sim's Gold Medal Pansies

A fine selection of the best of that wonderful strain. If you want the very best don't fail to get some of this seed.

1/4 oz., \$4.00; 1/2 oz., \$7.50; 1 oz., \$15.00

Cash or satisfactory trade references.
No C. O. D. shipments

L. J. REUTER CO.

PLANT BROKERS

329 Waverly Oaks Road, Waltham, Mass.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.

ADRIAN, MICH.

VIBURNUM PLICATUM

Also Berberis Thunbergii, Hydrangea
Paniculata, Weigela, Spiraea, etc.

Ask for complete list of
OAK BRAND SHRUBS.

The CONARD & JONES CO. WEST GROVE
PENN., U.S.A.

Robert Fyle, Pres.

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We are subscribers to the Nurserymen's Fund
for Market Development

ROBERT DYSART

CERTIFIED PUBLIC ACCOUNTANT

Simple methods of correct accounting
especially adapted for florists' use.

BOOKS BALANCED AND ADJUSTED

40 STATE STREET . . . BOSTON

Telephone Main 55

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists, Largest Growers
in America

BOX 415, DUNDEN, ILL.

ROSES

	100	1000
Tauschendschon 2 1/2-inch	\$10.00	\$90.00
Dorothy Perkins 2 1/2-inch	10.00	90.00

FIELD GROWN ROSES

2 and 3-year old

Tauschendschon, Perkins, Excelsa,
Crimson Ramblers, Lady Gay, Hia-
watha and others. For Fall delivery
\$40.00 per 100, 1-year-old plants,
\$25.00 per 100.

C. U. LIGGIT, Office 303 Bulletin Bldg. Philadelphia, Pa.

GODFREY GALLAS

The true type

	100	1000
2 1/2-in. pots	\$5.00	\$40.00
3 -in. pots	7.00	60.00
3 1/2-in. pots	14.00	

IBOLIUM The New Hybrid **HARDY PRIVET** (L. Iboia x Oval-
folium)
TO BE SENT OUT IN THE FALL OF 1919. Introducing of Box-Barberry.
Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.

FREESIA BULBS

Purity (Improved)

	Per 1000
Size 1 1/2-5/4ths inch (large)	\$8.50
Size 5/8ths-3/4 inch (mammoth)	13.50

NOW READY

CALLA LILY BULBS

Size 1 1/2-2 inches, \$9.00 per 100

Cash with order, less 2 per cent.

McHUTCHISON & CO., The Import
House
95 Chambers Street NEW YORK

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.

IRVINGTON, N. J.

SEEDS AND BULBS

Boddington's

128 Chambers St., N. Y. City

THE THRIFT HABIT.

Decision in the "Most Put Upon Man" contest is narrowed down to two, according to a Boston philanthropist—the bank teller and the street car conductor. The most monotonously hopeless job, this man says, is either trying to get people to move forward, please, or to convince the sweet young thing that just because the bank has lots of money is not a good reason why she may overdraw her account.

The Bostonian cannot decide which task is the worse. At any rate, he finds it pleasant to arrange outings and vacations for these unfortunates. Unquestionably they need vacations. It's a good work, and all one philanthropist can be expected to undertake, but it leaves the plumbers, bricklayers, members of the street cleaning department, the cigar store clerks, the elevator men and others who do the world's work sort of out of luck.

Almost every employer recognizes

the need of these men for vacations, and they get the usual two weeks off, with pay. But what do they do with the time? That depends upon what sort of fellows they are. If they have been standing in line Monday nights to make a payment upon Liberty bonds, and have invested their quarters in Thrift Stamps and put a five-dollar note regularly into a War Savings Stamp, they got the time allotted properly, the place at the seashore or in the mountains all picked out, and they lose no time getting under way.

If they have not acquired this habit they probably loaf a couple of days, trying to figure out some cheap place to go, then have to loaf the rest of the time, because the two weeks' pay, in advance, has dwindled down to a mark where it merely covers the rent and other regular bills.

By beginning early in the spring and saving the pennies out of the day's expenditure, and adding enough nickels and dimes, each day, to make a quarter, and buying a Thrift Stamp with that quarter, the vacation problem can be made easy.

HORTICULTURE

Vol. XXX

JULY 19, 1919

No. 3

MY CANDID OPINION

By a Retail Salesman

Penn, of Boston, has originated probably the boldest departure from ordinary methods of florists in newspaper advertising that has yet been recorded. In several of the Boston papers he has been putting out copy without any name signed. The copy reads as follows:

"Whose slogan is this?

"When you think of flowers think of ————!"

"When a business organization has reached that point in its relations with the public that it is unconsciously associated with its own industry as a whole, there must be a substantial business reason for it. In this instance the reason is found in the unswerving policy of rendering at all times the utmost in service.

"Of course everyone knows Boston's flower phone—Beach 6900."

This copy was put up in very attractive shape, with plenty of white space to set off the lines. Now the point to decide is whether this is really advertising of the best character. Mr. Penn's reputation for originality has not suffered by it, and the likelihood is that it has aroused considerable interest. After all, though, advertising flowers should be considered, it seems to the writer, largely from the viewpoint of the public. As Mr. Penn says, the florist should seek to serve, and it is a question whether this service is accomplished when the public is called upon to exercise even a little extra thought or a bit of speculation when it desires to order—say a wreath for a funeral. Isn't the essence of advertising after all to be found in meeting the want of a customer almost before he feels it? If suggestion has any value anywhere it is in advertising copy. Isn't it possible, too, that this kind of advertising may raise almost unconscious resentment in the mind of competitors, which is something not to be desired in the interests of the trade as a whole.

All this will be understood, of course, as not in any sense a criticism of Mr. Penn's advertising, which is always to be followed with interest, but as a general discussion of newspaper advertising in its widest application.

One original idea of Mr. Penn's is a capital one, that of using the expression "flower-phone." When he says at the foot of his ad. "Of course everybody knows Boston's flower-phone," and then gives the number, he is inevitably inviting the calls of all his readers who may be in need of flowers.

Florists of twenty or even ten years ago would have been amazed at the way in which modern store keepers are reaching out for business. It is no longer considered efficient to enclose one's self in a flower filled glass case and invite people to come in and buy your stock. A Cleveland retailer hit upon the idea some time ago of distributing cards all through business offices saying that he would be prepared to keep fresh flowers on the desks each day for a specified sum. The plan worked so well that it had to be stopped. That is to say, the business grew to such an extent and brought about so many complications that it was impossible to carry it on.

Another suggestion along the same line comes from England, where a writer encourages the use of flowers in shop windows. As he says: "It may be well worth while to supply your tailor, draper or grocer with sufficient flowers for a week or a fortnight free of charge, for the encouragement of others."

Storekeepers as a whole have not come to realize the value of flowers in their show windows, but this is something which can be brought about, not only on special occasions, but at all times. A few flowers properly arranged set off a window to a greater extent than any other adjunct. No doubt it would be feasible for a florist to undertake the business of supplying flowers, and perhaps arranging them, in order that there might be a fresh supply every day. Getting the thing started is largely a matter of salesmanship, but if an offer to do it for a week free of charge is accepted, and the florist can prove his point, there should be no difficulty in keeping the trade, once it is obtained. This would seem like a fertile field, and one well worth cultivating.

GARDENERS' AND FLORISTS' CLUB OF BOSTON.

The annual picnic of the club will be held at Cunningham Park, East Milton, on Thursday, July 24, 1919. This will be the first picnic held since the close of the great European War, in which over 30 of our members have been engaged, and some have paid the supreme sacrifice. On the coming occasion a good many of our members who have been demobilized will be present and participate in the games. We therefore look for a record attendance and the most successful picnic in our history.

TRADE PRICES TO THE TRADE ONLY.

The full resolution adopted at the Nurserymen's Convention in Chicago in regard to trade prices was as follows:

Recognizing the great diversity of interests of the members of the National Association of Nurserymen, we offer recommendations only on such questions where the interests of all converge, and where in the silence of the Association the interests of all would suffer.

Realizing the necessity of keeping open and profitable, the outlets for the distribution of nursery stock as fundamental to the success of the industry, therefore, be it

Resolved: The members of the American Association of Nurserymen shall not sell to any consumer of nursery products, whether private owners, parks, cemeteries, realty developments, municipalities, department stores, or other large buyers at prices which do not adequately protect in his sales and distribution expenses, the nurseryman who buys similar stock to sell again, and

Whereas: The professional landscape architect buys only as an agent, for his client, the planter, therefore, be it resolved,

That we disapprove of nurserymen giving their wholesale trade lists or trade prices to or through professional landscape architects.

Resolved: That any member who violates the foregoing resolution, shall forfeit his membership as provided in Article IX of the constitution.

NEWS AND COMMENT

NEW ENGLAND.

William N. Estabrook has been given permission to build a greenhouse on Holden street, Worcester, Mass., to cost \$3,000.

J. M. Ward & Co., the well known florists of Peabody, Mass., announce that their retail plant and flower business has been taken over by Norman W. Hunter and Howard Evans, under the name of Ward's greenhouses, Norman W. Hunter & Co., successors. J. M. Ward & Co. will use all of their glass for the growing of asparagus sprengeri for the wholesale market.

M. P. Quarry and Mrs. Quarry of Worcester, Mass., have been given a permit by Supt. George C. Halcott of the public buildings department to erect a greenhouse and boiler room at 875½ Main street, at a cost of \$2,500.

Says the Boston Traveler: Folks out Natick way will tell you Patrick Donahue, known to many as "Slick," is getting to be something of a financier as well as philanthropist. Mr. Donahue is at the head of the Boston Rose Conservatories and he's also at head of a group of Natick men endeavoring to aid their less fortunate neighbors in "owning a home." Not strictly a co-operative bank, but something on the same order. "Slick" has for his war cry "build now," and it's said his hair has actually stood on end several times at the quick results of his "war cry," coupled with the financeering and philanthropy which he and his associates are exercising in Natick.

G. S. Seavey & Son, gardeners and florists of Bangor, Me., have placed an order with Hitchings & Co. of Elizabeth, N. J., for a large frame greenhouse, which will be erected at their garden on Fourteenth street this fall. For the season of 1919, G. S. Seavey & Son could not begin to handle the large orders that they received for flower seedlings, geraniums, etc., and to meet the demands, they have begun to equip themselves for 1920 season. The Seaveys will devote their resources for the growing and marketing in great quantities for the wholesale merchants of seedlings and setting out plants, for the coming season. Orders have already been placed with growers for thousands of geranium cuttings, and they have allotted a large portion of their garden for various perennial plants, that are in great demand.

A. A. Pembroke, the well known carnation grower of Beverly, has opened a retail store at Salem, Mass.

Louis E. Smith of Lee, Mass., has contracted with a New York firm for the erection of a new steel-frame greenhouse to be 30 by 133 feet, and to have on the outside deep hot frames 133 feet long, also to build a large potting house, a work house, office and display house. The work is to begin immediately and will be completed Sept. 1. The old greenhouse is to remain and will be used entirely for chrysanthemums.

ST. LOUIS.

The St. Louis Florist Club held their regular monthly meeting at the greenhouses at Forest Park. About 30 members were present. The report of the transportation committee was read by W. J. Pilcher, who stated the fare to Detroit one way would be \$16.01. Nomination of officers then took place, as follows: For president, W. J. Pilcher, R. N. Rowe; vice-president, H. C. Berning, C. Cerney; secretary, J. J. Beneke; treasurer, Wm. C. Smith; trustee, three years, Oscar Ruf, F. H. Weber, Wm. Kruse, Paul Redan.

The market is well supplied with gladioli. In general higher prices are quoted for shipping stock as it requires special care.

The opening of the First National Bank, Monday, July 7th gave quite a demand for flowers and there was a specially beautiful display of gladioli and other summer flowers for the occasion.

Harry Schleter, formerly with George H. Angermuller, is now with Wm. C. Smith Wholesale Floral Co.

PHILADELPHIA.

Edward C. Dungan, the live wire who directs the destinies of the Wm. Henry Maule Corporation in this city, has been the recipient of universal congratulations recently, on account of his elevation to the exalted position of president of the American Seed Trade Association. This is a well deserved tribute to a man who, if he is anything, is of the self effacing type and who actually blushes if you happen to pay him a compliment. No man better deserves the honor. He is a real seedsman and knows the business in all its branches and from top to bottom. Just the kind of man the seed trade needs and they have done themselves proud in selecting him.

Howard M. Earl arrived home July

10th from his six months business trip through Europe and South America.

George J. Ball, the wholesale florist of Glen Ellyn, Ill., has been a recent visitor.

The cut flower market keeps up in excellent shape for July and the general feeling is cheerful and optimistic. The prices ruling on the 14th inst. were about as follows: Russell, Premier, Columbia, 6 to 25; Hadley, 10 to 15; Hoosier, 4 to 12; Killarney, Arenberg, Maryland, Ophelia, 3 to 8; Jonkheer, 6 to 10; Carnations, 3 to 4; Orchids, 6 to 12; Asters, 1 to 4; Sweet Sultan, 3 to 4; Gladioli, 6 to 10; Daisies, Sweet Peas, Gaillardia, Coreopsis, 1 to 2. There are very few Beauties to be seen around and they may be said to be off the general list for the present. Gladioli are very fine and in good variety. The kinds mostly seen, include the lovely pure yellow, Sunbeam; Myrtle, blush pink; Lily Lehman, white; Hally, brick red, shading to lighter at center; Prince of Wales, light red, a shade lighter than Halley but otherwise similar; Wilbruiik, blush pink with carmine tracing—darker than Myrtle. The prices noted above on roses apply only to the better grades. There are lots of low grade stock going at far lower prices. This also applies to carnations, gladioli, and other stock—so quotations should not be taken as an exact basis of how the market stands.

ROCHESTER

Business during the past week has not been very brisk. Carnations are small and the supply is limited. America gladioli are arriving and find ready sale. Roses are poor and scarce. Sweet peas are very scarce and are not of very good quality. Jap and Harrissi lilies are arriving in small quantities. Delphinium are about over with. Snapdragon, gaillardia, coreopsis, marguerites, mignonette, calendula and rambler roses are in large quantities on the market. A new crop of galax have arrived on the market.

H. E. Wilsons are making a specialty of jazz baskets consisting of gay colored flowers which are very popular with the trade.

Mr. Joe Werdeen is the proud father of an 8 pound boy.

A new flower store has been opened at 197 North street called the Utica Rochester Floral.

E. C. Kendig of Rosary flower store has closed the store during the summer months but is doing a good business at the Oswego store.

Society of American Florists and Ornamental Horticulturists

National Publicity Campaign.

Almost daily there comes to the office of the Promotion Bureau a hearty endorsement of the work of the Campaign. As an example: "Enclosed find our contribution towards the 'Say it with Flowers' Campaign. We are looking forward towards sending another check a little later on. We want to congratulate the Society on its splendid work in getting up such a campaign, and the results obtained should more than please every individual in any way connected with the business. Wishing you the greatest success, we are, very truly yours, Moraino Brothers, Rye, N. Y."

Still, the Fund lags. Why this should be is hard to understand. The time is past when argument might be necessary. Experience should be the preceptor now—and we have had a glorious experience. We have ascertained that, beyond a question of doubt, our efforts to increase the sale of flowers are being rewarded with a success beyond our fondest anticipation.

And you, Mr. Nonsubscriber, know full well that you are being benefited by this success. Give a thought to what might have been had this campaign never been started. Look over your books and note how many new customers you have recorded in the bad times now behind us, when you fully expected to notice a decline in your business. What is it that is reminding many thousands of forgetful people every day, that there are anniversaries they should not forget. Have you never received thanks from some cordial individual for the reminder which perhaps has saved him from criticism, even censure? Such happenings are common throughout the trade. Our slogan, "Say it with Flowers," is now deep rooted, let us see that its roots suffer not for want of nourishment.

It seems to be easier in almost any other line to raise a publicity fund than in the florist trade. The Florida growers of citrus fruits made a big success of their efforts last year to increase the sale of their products, and they are not what might be term-

ed a numerous body. Through their exchange, which undertakes work similar to that of our Promotion Bureau, it has been unanimously voted to make the assessment for publicity on the coming season as much as three cents a box on oranges and five cents a box on grapefruit. This assessment is expected to produce a fund largely in excess of \$100,000. Their California brethren are pushing forward a continuation of their efforts to establish "Sunkist" products on a scale which makes the Florida effort seem small indeed. These fruit growers know what they are about, and are working on experience. Every grower contributes to his fund.

And every florist, without exception, should contribute to his fund. Over 1,600 of the thinkers in the trade have already done so. Get busy with your think tank, Mr. Nonsubscriber. There is a space awaiting your name on the honor roll. Can you, in your own interests, refuse to fill it as your conscience dictates?

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

W. H. Barton, Madison, N. J. (1 year)	\$20.00
Joseph A. Greenbacker, Meriden, Conn.	10.00
E. Wagner, Madison, N. J.	5.00
Jas. B. Knight, Willoughby, O.	10.00
Wilson's Flower Shop, Painesville, O.	10.00
W. A. Calhoun, E. Cleveland, O.	10.00
Wilson's Florist Co., Cleveland, O.	10.00
Paul C. Hahn, Cleveland, O.	10.00
Cleveland Plant & Flower Co., Cleveland, O.	50.00
A. M. Albrecht, Cleveland, O.	25.00
H. F. Hanson, Elgin, Ill. (1 year) ..	5.00
Fred E. Plagge, Elgin, Ill. (1 year)	5.00
Aurora Greenhouse Co., Aurora, Ill.	25.00
Jos. M. Smely, Aurora, Ill.	10.00
George Souster, Elgin, Ill.	10.00
Geo. B. Dawes, Elgin, Ill.	5.00
G. A. Cornish & Sons, Elgin, Ill.	5.00
Joseph Turski, Grosse Point, Ill.	10.00
V. Bezdek, Grosse Point, Ill.	15.00
A. E. Hunt & Co., Evanston, Ill.	10.00
John Weiland, Evanston, Ill.	10.00
Sykora & Kalina, Batavia, Ill.	5.00
F. A. Parkmire, Chicago, Ill.	12.00
Frances B. Stammeyer, Chicago, Ill.	10.00
F. J. Nunzing, Chicago, Ill.	12.00
A. E. Marine, Chicago, Ill.	12.00
Argyle Posh Shop, Chicago, Ill.	6.00
Chas. Swanson, Chicago, Ill.	25.00
Mrs. T. Ball, Chicago, Ill.	12.00
J. H. Leach & Son, North Easton, Mass. (1 year)	10.00
Van Aken Bros., Coldwater, Mich. (1 year)	10.00
Reading Florist Association, Reading, Pa. (1 year)	38.00
Geo. C. Shaffer, Washington, D. C. (1 year)	25.00
Conrad C. Gindra, Poughkeepsie, N. Y.	15.00
Geo. A. Halladay, Bellows Falls,	

Vt.	5.00
L. A. Coles, Kokoma, Ind.	10.00
Chas. H. Campbell, Philadelphia, Pa.	25.00
Edw. Reid, Philadelphia, Pa.	25.00
Godfrey Aschmann, Philadelphia, Pa.	20.00
Harold Otter, Moorestown, N. J.	5.00
John Curwen, Berwyn, Pa.	5.00
The Friedley Co., Cleveland, O. additional	10.00
Mrs. W. S. Bell, Okmulgee, Okla. (1 year)	25.00
A. T. Parker, Stoneham, Mass. (1 year)	15.00
Jacob D. Spiegel, Norma, N. J. (1 year)	5.00
Mrs. J. J. Brady, Frankfort, Kas.	5.00
Frank F. Kerpen, Jr., Jersey City, N. J.	5.00
W. C. Stichel, Lexington, Mass.	10.00
Schultz Flower Shop, Westerly, R. I.	15.00
Gottlieb Bartunek, Riverhead, N. Y.	10.00
Doerrer & Son, Westfield, N. J. (1 year)	5.00
Willard F. Jaggee, Westhampton, L. I.	5.00
Gibbs Bros., Lynn, Mass. (1 year) ..	10.00
Shaw Fern Co., Pittsfield, Mass. (1 year)	10.00
.....	717.00
Previously reported	40,132.50
Total	\$40,849.50

JOHN YOUNG, Secy.

June 12, 1919.

1130 Broadway, N. Y.

A NUTMEG FOR THE BLUE HEN.

That report in the trade papers of June 28 regarding the activities of the Florists Publicity outfit is very interesting. I have only got to page one as yet; but I see that the Nutmeg State boys have contributed \$1,164.50 which is very good for a population of less than a million. On the same page I observe that the Blue Hen chickens have only been able to scrape up a 5-spot which is not so very good for a state with a population of about one-fifth of a million. I speak of course by the census of 1900 but the increase of population in both states is probably relatively equal and therefore does not affect the five to one proportion. Now if Delaware wants to show that she's a spunky old bird she will get busy right away and scrape up more than a 5-spot. About fifty 5-spots would be more like a game chicken. Maybe this comparison might be carried further afield than Connecticut and Delaware but I have not had time to look them up yet. You can do that for yourselves. But—to stick to the text—my idea for the present is to stir up my neighbors who have been enjoying an era of great prosperity these past five years. Every chicken in the florist business in the state of Delaware ought to do its share of scratching for publicity and not live on the scratching done by the less lazy birds in other parts. Get in the Publicity Garden and do your share. Get after that Nutmeg, Dear Old Blue Hen!

GEORGE C. WATSON.

HORTICULTURE

Established by William J. Stewart in 1904

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Getting together

What might be called a by-product of the publicity campaign being carried on by the S. A. F. & O. H. is the unification of the different branches of the florists' trade—a very important feature of this campaign. Growers, wholesalers, salesmen and retailers are finding their ultimate interests identical, and for that reason are working together better, probably, than ever before. The publicity campaign is bringing about a better understanding between all of those who are engaged in the business of growing and selling flowers. In the past there has been a certain feeling of antagonism, and even yet that feeling exists to a greater extent than it should, especially as respects wholesalers and retailers. Another factor that will help to close this breach is found in the florists' associations being formed in different cities, whereby wholesalers, retailers and growers are brought into the closest connection and meet together for the purpose of formulating policies which will be for the advantage of all three classes. It is often possible to iron out long-standing differences when the parties concerned get together and meet the situation fairly. Some of the points which breed differences are common wherever the florists' business is carried on. Take for example the matter of holding flowers until they are too far advanced for putting them on the market. Apparently this trouble, which has caused much ill-feeling in America, is also a source of irritation across the water. In a recent English paper this statement is made: "Many growers fail because they allow their blooms to arrive at a too forward condition before cutting, whereas every flower should be cut in such a condition that it not only passes through the hands of the wholesaler and retailer before it attains its prime, but should actually get into the hands of the public just before maturity. Not only does this give better satisfaction to the sender, but the more backward condition of the blooms should facilitate packing and mean less damage, and these conditions can be obtained by the joint efforts—in consultation—of growers and retailers." Here, of course is an opportunity for co-operation. Indeed, co-operation is absolutely necessary to bring about any improvement. For a long time retailers have felt that they were the suf-

ferers because they had to meet the disapproval of the buying public and stand the consequences if this public should be displeased.

The Worth of the Shows

Editor HORTICULTURE:

I read with very sincere pleasure the thoughtful, able and convincing letter from Miss M. R. Case in your last issue, and I feel certain that her appeal will meet with a sympathetic response from many of your readers. I particularly hope that all the directors of the Massachusetts Horticultural Society will read, mark, learn and inwardly digest what she has written. I believe a small fraction only of the membership agrees with the gradual diminution to the summer shows and Miss Case having had ocular proof of the deep interest taken of the masses in these exhibitions wants to see them continued, and has very generously offered to finance exhibitions to be held weekly in the summer months of 1920.

President Endicott in his inaugural address last January said, "Our trustees and members must have the same end in view—to do what is best for the interests of the society. A lack of agreement with the trustees on the part of members is much to be deplored." Thoughtful members have seen for years that this "lack of agreement" has been steadily widening, and is largely due to the fact that the trustees, or a majority of them, are obsessed with the idea that two or three exhibitions on an imposing scale, yearly, are better than a large number of more moderate size.

President Endicott in the same address said "though no doubt the policy of the past has made the society what it now is, it would be more than unwise to continue such a policy when it has served its time and generation." Surely here is contradiction; admitting that the policy made the society great, why change it?

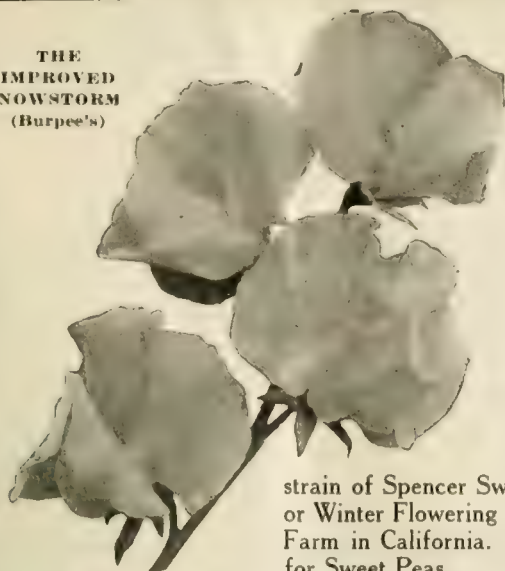
At the old Horticultural Hall on Tremont street we could find something of interest each week in summer and frequently in winter. Let us get back to at least fortnightly shows, which the Royal Horticultural Society of England never failed to hold right through the late terrible war in spite of all they had suffered. Is it to be wondered at that such a society gained over six hundred members net in 1918 and that it now has fifteen thousand on its rolls?

The Massachusetts Horticultural Society is a state and not a national institution; its most important work is the exhibitions it holds. Reduce these in number, especially during the summer, and interest will dwindle; increase them and a steadily growing army of amateur horticulturists will flock to its banner. Does it not seem utterly absurd that a great society like ours should seek to so stultify itself as to keep its halls closed, except for three or at most six shows? Is it any wonder that new members are enrolled grudgingly under such conditions? By all means, continue to give one or two large exhibitions yearly, but increase the number of free Saturday shows, particularly those which will display plants, flowers, fruits and vegetables grown outdoors.

During the Civil War, our society increased its membership, were stronger financially and held fourteen to sixteen exhibitions a year. Surely our present policy seems rather pitiful in comparison. I earnestly hope that in 1920 we will not be compelled to limit our shows to six as outlined, but that the suggestions of Miss Case will be followed, and this broader plan is bound to kindle the enthusiasm now lacking.

W. N. CRAIG.

THE
IMPROVED
SNOWSTORM
(Burpee's)



Burpee's Sweet Peas

The Twenty-Two Best Winter Flowering Spencer Sweet Peas for Florists

The first Spencer Sweet Pea in existence was brought to America by W. Atlee Burpee. Since then the House of Burpee has introduced over two hundred distinct new varieties each an improvement on the past. And by constant hybridizing for the last ten years we have developed the new Fordhook Early Flowering strain of Spencer Sweet Peas. We can now offer you all the finest colors in the Early or Winter Flowering type of Spencers—everything offered is grown on our own Floradale Farm in California. The House of Burpee is recognized as the American Headquarters for Sweet Peas.

3390 EARLY SANKEY (BURPEE'S). This truly magnificent white was awarded a special Silver Medal when exhibited at the great International Show in New York, March 20, 1915, also Certificate of Merit at the Spring Show of the Pennsylvania Horticultural Society, Philadelphia, March 23, 1915. Black seeded. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3392 IMPROVED EARLY SNOWSTORM (BURPEE'S). The result of a cross between King White and Yarrowa, it embodies the best qualities of those two varieties and easily eclipses all early-flowering white Sweet Peas to date. The flowers are of Yarrowa size, but finer form, as the standard does not reflex but is magnificently bold, though charmingly waved. A vigorous grower, the immense flowers are invariably borne in fours on very long stems. Awarded Certificate of Merit at the International Show, New York, March 20, 1915. Our Improved Snowstorm is so immeasurably superior to our original Snowstorm that we have now discarded the latter. Improved Snowstorm is the last word in Early-Flowering White Sweet Peas. Pkt., 10c; oz., \$1.50; ¼-lb., \$4.50; lb., \$15.00.

3342 EARLY CANARY BIRD (BURPEE'S). This is a splendid, rich, deep cream or primrose colored self. The flowers are of great size, beautifully waved, and usually borne three or four on a stem. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3348 EARLY DAYBREAK (BURPEE'S). The flowers are much frilled or waved, of largest size. The color is a splendid shade of rich rose-pink on cream ground, becoming deeper toward the edge of standard and wings. The entire flower is lightly suffused with salmon. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3376 EARLY LOVELINESS (BURPEE'S). The color is white, the entire flower being suffused soft pink and the edges distinctly picotéed with rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3351 EARLY ENCHANTRESS (BURPEE'S). It is a bright rose-pink, becoming deeper toward the edges of standard and wings, gradually softening in tone toward the center of the flower. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3383 EARLY PINK BEAUTY (BURPEE'S). The color is soft rose-pink on white ground, richer toward the edges, gradually softening in color as it reaches the center of standard and wings. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3344 EARLY CHERRY RIPE (BURPEE'S). A particularly bright and taking color and quite new in this section. It might be described as a glowing cherry or salmon-cerise self. Awarded Certificate of Merit at the International Spring Show, New York, March 20, 1915. Pkt., 10c; oz., \$2.50; ¼-lb., \$7.50; lb., \$25.00.

3381 EARLY ORANGE BEAUTY (BURPEE'S). Similar in color to Helen Lewis, therefore a glowing orange-scarlet with softer colored wings. Extremely free and early blooming, valuable alike for culture under glass or in the open, as it withstands the sun and weather well. Pkt., 14c; oz., \$3.00; ¼-lb., \$9.00; lb., \$30.00.

3362 FORDHOOK ROSE IMPROVED (BURPEE'S). Quite distinct from our original Fordhook Rose. The flowers are of immense size, usually borne in threes and fours on very long stiff stems. In color similar to the well-known George Herbert. A pleasing shade of rosy carmine. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3374 EARLY KING (BURPEE'S). The finest early-flowering crimson. The flowers are of great size, perfect form, averaging fully two inches in diameter. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3393 EARLY SPLENDOR (BURPEE'S). A magnificent new deep rose self. The rich rose-crimson color is accentuated by the distinct white blotch at the base of standard and wings. The flowers are of great size, usually borne in fours on very long stems. Similar in color to the Summer-flowering Rosabelle. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3386 EARLY ROSY MORN (BURPEE'S). Flowers grown under ordinary field culture have measured fully two inches in diameter. The flowers are usually borne in threes or fours on stiff, long stems. Color, a pleasing shade of rose with crimson-scarlet standard. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3375 EARLY LAVENDER KING (BURPEE'S). A first-class lavender has been much wanted in this type, therefore we have great pleasure in offering the new Lavender King. This glorious new variety is a rich, true, deep lavender throughout. Similar in color to the summer-flowering varieties, Burpee's Orchid and R. F. Felton. The flowers are of large size, beautifully true waved form, and borne in threes and fours on stems of great length. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3338 EARLY BLUE-BIRD (BURPEE'S). This is a charming shade of blue. Somewhat deeper than Wedgewood, but more of a true self, especially as the flower ages. In our opinion, the best blue for indoor culture. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3399 EARLY ZEPHYR (BURPEE'S). This is a delightful shade of pale blue or lavender. It might be briefly described as a silvery blue self. An extremely dainty and charming variety. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3380 EARLY MAUVE BEAUTY (BURPEE'S). Color a pleasing shade of rosy mauve. The flowers are of immense size, often measuring two and one-half inches in diameter, yet exquisitely waved and of best Spencer form. A strong, vigorous grower and very free flowering. Charming under artificial light. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3346 EARLY DAININESS (BURPEE'S). This has always been a favorite since it was first exhibited in 1915, when it was certificated. We have only now been able to work up a sufficient stock to offer to our friends. A strong grower, with flowers of largest size and usually produced in fours. Color, pure white edged rose. Similar to Summer-flowering Dainty. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3352 EARLY EXQUISITE (BURPEE'S). The ground color is a soft shade of primrose, the edge of the standard and wings being beautifully "picotéed" with deep rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3361 FORDHOOK PINK AND WHITE (BURPEE'S). This is similar to the old Blanche Ferry, having a bright, rosy-pink standard with white wings, lightly suffused rose. Pkt., 7c; oz., 60c; ¼-lb., \$1.80; lb., \$6.00.

3398 YARROWA. The flowers average two and one-half inches in diameter; many are duplex or double. The color is a bright rose-pink with a clear, creamy base. Our stock of this popular Australian variety is absolutely true. Grown by us from seed procured direct from the introducer. Pkt., 7c; oz., 75c; ¼-lb., \$2.25; lb., \$7.50.

3357 EARLY FANTASY (BURPEE'S). Striped and marbled with rich rose-pink on a creamy white ground. Exceedingly bright and it makes a telling bunch when cut. Extremely free and a continuous bloomer, the flowers usually borne in threes and fours on long stems. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

The prices quoted are net for packets as well as larger quantities, f.o.b. Philadelphia, for delivery July to December. The above varieties—each the best in its class—provide a complete range of colors. We have many other desirable varieties of Early Flowering Spencers on which we shall be pleased to quote prices upon request.

W. Atlee Burpee Co.,

Seed Growers Philadelphia.

TRADE NOTES

THE DETROIT CONVENTION.

No effort is being spared to make the convention at Detroit, Aug. 19, 20, 21, the banner convention in the history of the S. A. F. & O. H. The outlook for the Trade Exhibition is that the immense floor of the Arcadia Auditorium will be taxed to the limit to accommodate the exhibits.

The following are among those who will exhibit: Pittsburgh Cut Flower Co., Pittsburgh, Pa.; The McCallum Co., Pittsburgh, Pa.; Kroeschell Bros. Co., Chicago, Ill.; Jackson & Perkins Co., Newark, N. Y.; Kanawha Mfg. Co., Chicago, Ill.; Benj. Hammond, Beacon, N. Y.; Poehlmann Bros. Co., Chicago, Ill.; Ove Gnat Co., La Porte, Ind.; S. S. Pennock Co., Philadelphia, Pa.; American Bulb Co., Chicago, Ill.; Duro Paper Products Co., Chicago, Ill.; J. G. Neidinger Co., Philadelphia, Pa.; Alex Henderson & Co., Chicago, Ill.; Burlington Willow Ware Shops, Burlington, Ia.; Allan N. Humason, Chicago, Ill.; Foley Greenhouse Mfg. Co., Chicago, Ill.; Vaughan's Seed Store, New York-Chicago; American Greenhouse Mfg. Co., Chicago, Ill.; Wertheimer Bros., New York, N. Y.; John A. Evans Co., Richmond, Ind.; Henry A. Dreer, Inc., Philadelphia, Pa.; M. Rice Co., Philadelphia, Pa.; Schloss Bros. Ribbons, Inc., New York, N. Y.; Robert Craig Co., Philadelphia, Pa.; H. Bayersdorfer & Co., Philadelphia, Pa.; Lion & Co., New York, N. Y.; H. F. Michell Co., Philadelphia, Pa.; Skinner Irrigation Co., Troy, O.; Lord & Burnham Co., Chicago, Ill.; Ionia Pottery Co., Ionia, Mich.; Cohen & Hiller, New York, N. Y.; B. Hammond Tracy, Inc., Wenham, Mass.; Joseph Heacock Co., Wyncote, Pa.; Hitchings & Co., Elizabeth, N. J.; A. L. Randall Co., Chicago, Ill.; Jacob Kier Nielson, Oak Park, Ill.; Peters & Reed Co., So. Zanesville, O.; Russin & Hanfling, New York, N. Y.; Max Schling, New York, N. Y.; Fred J. Mead, Newark, N. J.; W. A. Manda, Inc., South Orange, N. J.; John Lewis Childs, Inc., Flowerfield, L. I., N. Y.; D. Hill Nursery Co., Dundee, Ill.; Chicago Feed & Fertilizer Co., Chicago, Ill.

At this convention action will be taken on a recommendation that the dues in the Society be increased to \$5.00 per year, and that the life membership fee be increased from \$25.00 to \$50.00. Only members in good standing can become life members, therefore it is obvious that any applying for

this membership must be clear on the books for the 1919 dues. It goes without saying that life memberships taken out now will forestall any action emanating from the Convention.

The local committees in Detroit are actively at work, and, it is understood, have laid out a program for the entertainment of their guests which will be highly pleasing to all.

OBITUARY.

Joseph Beavis.

Joseph Beavis, the well-known Philadelphia florist, died at his home on Limekiln Pike on the 7th inst of heart disease. Mr. Beavis was a native of England and came to this city as a young man. In 1867 he married Miranda Schronk of Falls of Schuylkill. One son, two daughters and his wife survive him. He was one of the pioneer members of the Florists' Club of Philadelphia, established 33 years ago. Interment took place on the 10th inst at Hillside cemetery. He was 75 years of age.

Arthur F. Barney.

We greatly regret to record the death of Mr. Arthur F. Barney at the age of 66. Mr. Barney passed away in Worcester early in the month, after three months illness. He was very well known in the seed trade and highly respected. For many years he was with Schlezell & Fottler Co. and later became president of the Thomas J. Grey Co. He will be sadly missed.

PHILADELPHIA.

On July 12 the S. S. Pennock Co. played the Leo Neissen Co. a game of ball at the Shriners Country Club, Edge Hill, Pa., the score being 25 to 6 in favor of S. S. Pennock Co. All were guests of Mr. Chas. H. Grakelow. You all know Charlie, or have heard of him. The prince of good fellows, and he did the thing in the usual Grakelow way, plenty of refreshments, etc. After the game supper, which was A No. 1, there was speaking. Mr. Grakelow acted as toastmaster, and he distributed a number of prizes among the boys, and both the prizes and presentation remarks were in fitting with the way they played, after which there were very fine moving pictures until late in the evening when all journeyed

home feeling that they had had a very enjoyable afternoon—could not have been improved on in any way only really the game was too one sided to suit S. S. P. Co. There is talk of a return match when the S. S. P. Co. hopes the opposing team will be able to make a more creditable showing.

The American Rose Society held an executive committee meeting at the Civic Club July 14th. An account of the proceedings will be issued by Professor White, the secretary of the Society.

COMING EXHIBITIONS.

Will secretaries please supply any omissions from this list and correct dates that have been altered:

August 9-10, Boston, Mass.—Exhibition of gladioli and phlox by Massachusetts Horticultural Society. Wm. P. Rich, secretary, Horticultural Hall, Boston.

September 9-11, Hartford, Conn.—Fall flower show of the Connecticut Horticultural Society. Alfred Dixon, secretary, Wethersfield, Conn.

September 11-14, Boston, Mass.—Dahlia, fruit and vegetable exhibition of the Massachusetts Horticultural Society. Wm. P. Rich, secretary, Horticultural Hall, Boston.

September 18-19, Providence, R. I.—Dahlia show of the Rhode Island Horticultural Society. E. K. Thomas, secretary, Kingston, R. I.

BUD DROP OF SWEET PEAS.

Bud drop can be brought about at will. It is caused by the atmosphere of the house being over-charged with cold moisture. Anyone who has had experience knows the minute he enters a Sweet Pea house if the conditions for "bud crop" exist. The trouble is more apt to come in spells of cloudy weather. In cloudy weather the vines, through the absence of light, and by our keeping up a flowering temperature, make a tender growth. The buds are also tender, and if they are to stick the atmosphere must be sweet and buoyant. In such times the manipulation of the steam pipes and the ventilators is the only means of combating the trouble. Ventilation should be given with great care so as to prevent too sudden changes; the ventilators should be opened gradually and the heating pipes gradually shut off. In cloudy spells they should be kept rather on the warm than on the cool side. I prefer a temperature of 67 degrees on bright days, and 58 degrees to 60 degrees on dull days, with a night temperature of 50 degrees to 52 degrees.

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THE GARDENERS' SECTION

A FIG TREE IN NEW ENGLAND.

Among the fruit trees of Hillcrest—the cherries, apples, pears, quinces, peaches, plums and nectarines is a fig. It grows on the wires of the espalier two feet in front of a high stone wall. In winter we turn it under the soil, digging away the earth in front of it and bending it forward. It lived through the winter of 1917 and '18 but bore no fruit the following season. This year it is growing five figs. The year it came from the nursery, the summer of 1917, it ripened a few fruits.

The tree is now about four feet high and is trained flat against the wires. It is on the back row of the espalier where it is shaded by the peach trees in front. It is suckering from the bottom having one thrifty little offshoot which we mean to transplant.

We have not yet ripened any nectarines but have had some trees sent to us with which to experiment by the Bureau of Plant Industry in Washington. At Hillcrest we are interested to see what can be grown in our climate and have sent for seeds to South Africa and Laborador. Since reading Stefansson's description of the Arctic regions we feel as if more might be done with the northern flora.

M. R. CASE.

Hillcrest Farm, Weston.

PERSONAL.

Peter MacDonald has succeeded John Alexander as superintendent on the estate of C. M. Daniels, Sabattis Park, Long Lake West, N. Y., Mr. Alexander having resigned.

William Warburton has gone from Franklin, Mass., to Fort Wayne, Ind., to become gardener for Theodore F. Thieme.

Malcolm McAllister is now gardener for E. C. Delafield, Riverdale, N. Y.

It is understood that Joseph Goodier, who was long head gardener on the estate of the late Charles G. Roebling, Trenton, N. J., and who made a splendid reputation for himself there, is to be superintendent of a new estate now being developed at Ogontz, Pa.

John Watson has withdrawn from the management of the Princeton Nurseries. Mr. William Flemer, Jr., recently returned from France, will take charge, Carl Flemer managing the nurseries at Springfield, N. J.

CONTROLLING THE ROSE MIDGE

According to the Department of Agriculture a severe infestation of the rose midge can be controlled, if not entirely eliminated, in a comparatively brief period by the careful application of tobacco dust on the soil and by persistent nightly fumigation with tobacco, in the form of stems, nicotine papers, or one of the volatile nicotine preparations.

Where earth walks are present, it is advisable to spray the walks also with a 5 or 10 per cent kerosene emulsion.

In the case of light infestations, the midge can be controlled by systematic nightly fumigations with tobacco fumes, which should be continued until all adults disappear; or by a careful application, at the proper season, of tobacco dust. Inasmuch as the broods probably overlap during the summer, there is a possibility that frequent syringing of the plants would cause much of the dust to wash down into the soil before all larvae matured; hence there is a chance that some would fall on and enter earth where the dust had lost its effectiveness. It would seem, therefore, that the most opportune time to apply the dust, if not accompanied with nightly fumigation, is during the latter part of October or the first three weeks of November, at which season the last generation of larvae leaves the plants, enters the ground, and constructs overwintering cocoons. If dependance is placed on the dust alone, it is imperative that the application be so timed as to be on the soil before the larvae seek winter quarters. No hard or fast rule governing the date of this application can be recommended for all localities, since temperature naturally influences the final disappearance of the larvae.

Although tobacco stems have been used in greenhouses from time immemorial they are being replaced rapidly by nicotine paper and the volatile nicotine extract, owing to the fact that the nicotine content of the stems is so variable. Tobacco stems in the proper condition (those which have not been allowed to become wet and dry out) will yield good results. As there is no satisfactory and easy method by which the florist can determine accurately the nicotine content of tobacco stems, however, it will probably be a saving of time and money to use the nicotine papers or

the volatile nicotine extracts, in which case the directions on the label of the container should be followed.

Kerosene emulsion (stock solution, 66 per cent oil) is made after the following formula:

Kerosene (coal oil, lamp oil) gallons 2
Soap (fish-oil or laundry) (or

1 quart soft soap) pound ½
Water (soft) gallon 1

First dissolve the soap in boiling water, then remove the vessel from the fire and immediately add the kerosene, thoroughly agitating the mixture until a creamy solution results. The stock solution may be more conveniently made by pouring the mixture into the tank of a spray pump and pumping the liquid through the nozzle back into the tank for five minutes. A 10 per cent solution can be made by adding to each gallon of the stock solution about 5 2-3 gallons of water. In some regions the water is "hard," and in such cases it should be broken with a little lye, or rain water should be used.

A full description of the life habits of the rose midge may be obtained in Bulletin No. 778.

STARTING PANSIES.

Pansy seed is planted at different seasons of the year, but it depends upon whether the flowers or the plants are to be sold. The business of raising pansy plants for the spring market has grown to be very large. Around Boston many market gardeners have taken it up and devote a considerable space to the pansy crop. The plants are sent to market in bushel boxes as soon as they begin to bloom in the spring.

It is a fact to be remembered that only the very best seed is worth planting. Pansies run in strains rather than in particular varieties. You should take care to get a strain which is known to be free blooming, of large size, well colored and with long stems. The price is not to be questioned, for seed of the right kind can be grown only by those who have acquired the skill and understand the business. It not infrequently happens that strains which have acquired the reputation for quality deteriorate when they pass into the hands of others.

According to Mr. Charles Frost, writing in Bailey's Cyclopaedia of Horticulture: "It is conceded by European pansy specialists who have visited the United States that the Ameri-

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can pansy seed planted on American soil will produce larger and finer flowers than the foreign grown seed of the same strain planted on the same soil. Pansies degenerate very quickly; therefore, it is important to procure fresh seed every year from a specialist."

Mr. Frost's planting directions are as follows: "A cold frame is a good place in which to sow the seeds if the boards are not full of fungus; or a box 9 inches to a foot high might be made on fresh ground that is a little sandy and was well manured for a previous crop; dig and make the soil fine and water it well before sowing the seeds. Sow in drills 3 inches apart and one-sixteenth inch deep. One ounce of seed will sow about 300 to 350 feet of drill, or 90 feet if sown broadcast. Cover the seed one-sixteenth inch deep with fresh sand or sandy soil, pat down or roll well and give a light watering. The surface should be dusted with sulfur or grape dust to keep the damping-off fungus from starting. Cover with boards leaving space for ventilation; or, they can be covered with moss, hay or straw, being sure to remove the covering as soon as the seed is sprouted. Pansy seed will not sprout well if kept above 75 degrees. After sprouting and until they have the second leaves, it is a good plan to cover them with the thinnest muslin, tacked on frames. Sashes may be used if well shaded and well ventilated."

This is the time to plant the seed, although the work may be left until the first week in August if plants for spring sales are to be grown. It is better, though, to get the seed in before the last of the month when plants are to winter over outside. It is the custom of growers around Boston to shift the plants to new beds about six weeks after seeding. These beds are usually raised a little and the soil is made rich. Plants are set out from six

to eight inches apart each way. Sometimes cold frames are used, but many of the largest growers winter out their plants outside, depending upon the raised beds to shed the water.

One transplanting is enough. It is said that transplanting has a tendency to make the flowers small. After the ground is frozen, a mulch of hay or grass should be given, but it should not be heavy, and should be removed early in the spring. Pansies for winter blooming are transplanted to the beds or benches in the greenhouse. Quoting Mr. Frost again: "There are from 25,000 to 28,000 seed in one ounce of pansy seed. Growers usually allow one ounce of seed for 4,000 plants. With good fresh seed, and great care, 7,000 to 8,000 plants should be obtained from one ounce of seed."

SWEET PEAS UNDER GLASS.

Writing about sweet peas under glass in the *Sweet Pea Bulletin* William Sims says:

I have not seen any bad results from the temperature dropping to 45 degrees or 46 degrees in zero weather. I think it is much better for the plants if it goes down to 48 degrees, for by keeping the temperature up to 50 degrees in zero weather means too much artificial heat, and the vines become thin and exhaust themselves. I believe the condition produced by the shutting off of steam pipes without proper attention to the ventilation bad for the healthy growth of the plants. But the principal cause of bud drop is in the afternoon when the house is closed up to hold what is advisable of the sun's heat. This heat is allowed to chill as the temperature drops. Enough pipes should be turned in good season so the atmosphere will never get damp and sticky, but slowly fall to the desired temperature for the night. I have had no case of bud dropping for many years, but it keeps a man continually on the job attending to ventilation and

steam pipes. Many miles are trodden each day in the month of March, especially when the sun is in and out. Along in April when the days are long and the sun runs high the Peas can be grown much cooler without having bud drop. The absence of light in Mid-winter while keeping up a flowering temperature, makes the hardest time for the grower.

Tying and staking.—The best method of doing this is to run a wire lengthwise of the house directly over the row, 10 feet, if possible, from the ground. This should be held in place by cross wires at intervals of 8 feet or 10 feet. While the plants are small short bamboo canes, those that are practically worn out, about 2 feet to 3 feet long, are inserted every 3 feet in the center of the row. Commence at one end with a ball of white cotton string and run out horizontally along the sides of the row, going round the stakes and making a tie at every five or six stakes to prevent slackening. When the plants have reached the top of the stakes insert a longer and stronger stake every 8 feet and tie the top to the overhead wire. A Cypress stake, 1 inch square, is good for this purpose, or two or three long bamboo canes tied together make a very neat arrangement.

Watering.—In their early stages in the Autumn the plants require considerable water, and in fine weather may be watered overhead, but as the days shorten the amount of water should also be lessened. I never use water overhead after the beginning of November. When in full crop they require much water, and if the drainage is good cannot be over-watered. Sheep manure is very beneficial at times, and may be applied three or four times in the season, watering it in. This may be applied at any time of their growth, but it is presumed that the grower has, in preparing the soil, added enough to carry the crop into full bloom.

GRASS SEEDS FOR GOLF COURSES AND LAWNS

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Varieties to Grow—Since the dissemination of the Spencer type I have grown practically every variety that came along. I have done this because I have got a great deal of personal enjoyment in seeing the new ones come into flower, but as money makers there are only a few; in fact, my salesman says to me, and has done so for years, "Grow only Christmas Pink." This is a color that takes with the great masses and if good, can always be sold in any quantity. Venus would be my second choice, being the finest formed flower of any; the color is bluish pink. It is an immense cropper, producing more flowers than any variety I have grown. Mrs. Skaach would be my next selection, the color much like Countess Spencer. White Orchid comes next, being the best white I have yet grown. There are a few more worthy of growing such as Mrs. Chas. Zvolanek, lavender; Belgian Hero, orange; but what the public most desire are the first named one and the next four.

Marketing.—Boston being the consumer of practically all my Sweet Peas, the bunch required here is one containing 25 sprays with an average of three blooms to the spray. Should the number of blooms to the spray be

lacking, 30 or more sprays should be used, making a uniform sized bunch. Pickers of Sweet Peas never count more than a few times; they get to know the size without counting. I have never made a practice of grading the blooms. A much nicer bunch can be made if a few shorter stemmed sprays are put in the front of the bunch, with the longer stems at the back. Of course, growers of Sweet Peas know that at a certain period of the crop the stems are longest; after this period the length of stem gradually shortens, so that a crop at its best is a grade or two better than one that is past its best.

FALL LAWN SEEDING.

Much interest is being shown in the making of lawns in the fall or late summer. In his admirable book, *The Florists' Manual*, Wm. Scott writes as follows:

Where there is any quantity of lawn to make or renew, seeding is always preferable to sodding. Not alone does it make a better looking lawn, better grass and better quality all around, but it is far cheaper. The same care in digging deep and manuring is essential, and the top two inches of surface should be of good, friable soil,

that the delicate little plants may get a good start.

The very best time of the whole year to seed a lawn is from the last of August to the middle of September; even a little earlier in August is all right. We are almost sure to get some showers the last of August, and if within reach of the hose you are not dependent on showers, and if sown at that time or very early in September you have a lawn well established before winter sets in.

In fall sowing, which is the best, there is no need of sowing anything with the grass seeds. Sometimes in spring sowing a sprinkling of oats or rye is sown, which germinates quickly, and by its growth shades and protects the little grass spears till they are up a few inches. In a few weeks the oats are mowed off with a scythe and the grass takes care of itself. This, of course, is quite unnecessary where you sprinkle occasionally. Our climate is uncertain—no two seasons alike—but although I have seen many acres sown for a lawn in August which was a disappointment because there were no rains, yet it is by far the surest and best time to sow.

There are many seedsmen, leading firms, who give great attention to the



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preparation of lawn grass seed, and when ordering you should say whether the soil is a clay loam or sandy, whether it is boggy or moist, or high and dry.

The fine mixtures of the seedsmen are all right and a few dollars are of little consequence in such an important and permanent undertaking as making a lawn.

Most of the grass seeds are very light and will fly in every direction, much preferring the openings in your face to the ground. When there is a very gentle breeze blowing steadily in one direction is a good time to sow. You will soon find out then where your seed is settling and gauge your distance accordingly. About thirty to forty pounds of grass seed are usually sown to the acre and five or six pounds of white clover.

If a small plot of ground, it is easy to know when you have sown enough. And don't be afraid of sowing too thickly. There may be two little plants spring up where one would do, but it will be a case of the survival of the fittest. The stronger will crowd the weaker out. Therefore, sow plenty of seed. Neither in spring nor fall is it advisable to keep the newly made lawns mowed closely, so you must waive appearance for the benefit of the grass, at least for the first season.

THE ASH TREES.

Prof. Sargent has an interesting article about ash trees in one of his recent bulletins. It reads as follows:

Fraxinus is the name of the genus to which all ash trees belong, although it may be well to say that the trees called Mountain Ashes are not ashes but belong to the genus Sorbus, a member of the Rose Family and closely related to the Pears, Apples and Chokeberries. Ash trees occur in nearly every temperate part of the Northern Hemisphere, but are more abundant in species in eastern North America than in other parts of the world. Ash trees fall naturally into two groups; those of the first group are furnished with narrow white petals (Ornus) and the flowers of those in the second group are destitute of petals.

The best known tree of the first group is the little tree called Manna Ash or Flowering Ash (Fraxinus Ornus) a native of southeastern Europe which has long been an inhabitant of the gardens of western Europe. It grows well in the middle Atlantic States, but has never been a success in the Arboretum where a tree which had flowered in 1917 was killed to the ground by the extreme cold of the following winter. Three of the flowering Ashes are natives of the United States, Fraxinus cuspidata and F. Greggii of

the Mexican boundary region and F. dipetala of the mountain valleys of California. These three plants are not in the Arboretum collection where they would not be hardy, but Ornus is well represented here by two eastern Asiatic species, Fraxinus Bungeana, a small shrub from northern China which was first raised here in 1882, and by the Japanese Fraxinus longicuspis which grows in the Arboretum both as a shrub with several spreading stems and as a small tree.

Of the Ash-trees without petals and therefore with inconspicuous flowers there are seventeen species with a number of more or less distinct varieties which are natives of the United States. Six of these trees grow in the northeastern part of the country and three of them are common New England trees. To these trees color names have for no very obvious reason been given, at least in books, for it is doubtful if these names have any general application among persons whose knowledge of trees has come from an intimacy of association with them in the forest or by the roadside, and not from the study of other persons' ideas about them recorded in printed pages. To persons who know trees from books White Ash, Black Ash, Green Ash, Red Ash and Blue Ash are familiar names.

TIMELY WORK IN THE GREEN-HOUSE

The seed of *Calceolaria hybrida* can be sown from now up to the first week in August for next season's trade. The soil should be a very sandy mixture with some leaf mold. Water the pans until they are wet through, and then scatter the seed thinly over the surface. A brick or a piece of board should be used to press the seed gently into the soil; no covering of soil is required. Lay a pane of glass over the pans and place in a frame where the shade should be heavy at first and towards fall it should become lighter. As these young plants are very susceptible to damp, it is best to avoid extremes either way in watering. Timely shifting from box to box lessens the loss through damping off. They should be potted in small pots when they have made from four to six leaves, a light sandy mixture still being used. In bright hot weather the young plants should have a fine syringing overhead several times a day.

The seed of mignonette should be sown at once. A very successful grower of mignonette uses three-inch pots, placing a few seeds in three little groups in each pot. It is safer, however, to sow a pinch or seed on the bench or bed where they are to remain and flower. Each plant should be given one foot of space each way. It is difficult to transplant mignonette successfully, for if the soil drops off the roots the little plants are a long time in making a start. A dozen plants may come up where your pinch of seed was sown, and will do no harm until the little seedlings are an inch high. Then all but the strongest plant should be pulled up. The chief enemy of the young mignonette is the larva of the sulphur-colored cabbage butterfly which lays its eggs in August and September. As soon as this butterfly makes its appearance, spray the plants lightly and then dust them with powdered hellebore.

During the hot weather it will be necessary to go over the *Chrysanthemum* beds every day and water the dry places. Do not let the plants get overrun with fly before using effective means to keep them under control. These plants will not stand a humid or stagnant atmosphere, so first of all see that they have plenty of fresh air. Give a good syringing early every afternoon, which will allow the foliage time to dry out before night. In cloudy

possible. Watch for other insects besides fly. Hand picking will be necessary for caterpillars and grasshoppers, but plenty of syringing will exterminate red spider and thrips.

Now is the time to plant carnations. In fact, a house or two may have been planted earlier, but this is the beginning of the real housing period. The benches when emptied should be cleaned and given a good coating of whitewash. Then they should be filled at once, for if left exposed to the sun and air for a week or two they will not last. Give the plants six inches of rich soil. See that the plants are not set too deep, as deep planting causes stem rot. Water at the base of each plant and spray frequently until the plants take hold. Continue to water at the base of the plants for a few weeks to prevent the soil becoming sour and to encourage root action, and keep the soil moist on top by heavy sprayings.

Lorraine begonias should be given just enough shade to keep the foliage from burning, but too much shade keeps them too soft. Look them over two or three times a day to see that none are dry, and careless watering should be avoided at all times. If pot-bound, shift at once; but do not shift unless you are positive that the plants are in need of it. A porous soil is necessary. Loam and leaf mold mixed with about one-fifth of well rotted cow manure, with plenty of drainage in the pots, seems to suit the plants nicely. Be sure to keep the flowers and buds removed, as growth is what you want now. Keep the plants free from green fly by spraying weekly with a nicotine solution.

Cypripediums are now growing well, and a little weak liquid manure should be applied once a week as the roots fill the pots and pans. The use of chemicals should be avoided. The strength can be slightly increased as the roots become more matted. Ventilate freely at every favorable opportunity. An occasional sponging with a weak solution of tobacco water should be given to keep the plants free from thrips, and a light fumigating once or twice every fortnight will aid in keeping off the pests. See that the plants do not suffer for water, but do not keep them wet all the time as the compost will become sour. A moist atmosphere during all seasons is essential to their well being. Air should

be admitted freely during wet weather, otherwise the fleshy leaves are liable to rot or become spotted.

PATENTS GRANTED.

Copies of any one of these patents can be obtained by sending fifteen cents in stamps to Siggers & Siggers, Patent Lawyers, Box No. 9, National Union Insurance Building, Washington, D. C., and mentioning HORTICULTURE.

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NEW YORK

The condition of the market is and has been decidedly dull since the 3rd of the month. The hot weather and holidays supplied an increased number of roses with an abundance of outdoor stock—too much for the small demand to absorb. Much stock is lost. Only a few varieties such as Key, Beauty and Columbia are of decent quality. Carnations have the summer mark on them. Good ones are the exception. A limited number of Asters are to be had but they don't look much. Valley is still scarce and good cattleyas are not to be had in quantity.

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PREVENTING SURFACE ROT OF PEONIES.

W. F. Christman, secretary of the North West Peony and Iris Society, has written some interesting facts in regard to peonies rotting at the surface of the ground. This has been an unusually rainy and cold spring in the Northwest, and this disease has been particularly annoying in a good many gardens. This disease is known as Botrytis, or a rotting at the base of the stalk. Peonies should be carefully watched, and if any of the young, or even nearly mature, stalks show a wilting, the trouble will doubtless be found in the stalk being rotted off near the base of the ground. The disease affects stems, buds and leaves in the order given and is always more prevalent during rainy seasons. The rot usually does not extend very far below the surface of the earth.

Removal of the affected parts and all earth immediately surrounding the diseased portion of the plant is the best remedy for eradication of the trouble. A small trowel can be used to good advantage in removing the earth, which should be carefully and thoroughly done. After soil has been removed, cut off the stem of the diseased shoot above the crown or directly below the diseased portion. Care should be taken that the affected portion of the plant does not come in contact with the balance of plant, or the disease may be easily transmitted to the healthy portion. Destroy the diseased parts and replace the soil removed with other soil or sand. Fortunately the disease does not affect the root of the plant, and if entirely removed the young shoots thrown up the following year will be healthy. If disease is not removed, they will be contaminated by spores of the disease that remain in the soil or live in the old diseased stalk from year to year. This disease is very similar to Sclerotinia. A little watchful care and attention will soon eradicate the disease.

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**HYDROCYANIC ACID GAS IN
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The use of hydrocyanic acid gas for white fly or black aphid in greenhouses has become common, but all growers do not know how to handle the gas in the right way. William Hunt of Guelph, Ont., has outlined the whole process as follows:

Quantity of material required for every one thousand cubic feet of space to be fumigated for a general collection of greenhouse plants and tender plants:

¼ oz. Potassium cyanide by weight.

½ oz. Sulphuric acid by measure.

1 oz. Water by measure.

Bulk cyanide (not flaked cyanide) 98 per cent pure should be used. Keep the cyanide in an air-tight glass jar labelled "Poison," as the cyanide itself and the fumes are deadly in their nature to all animate life.

The proper quantity of cyanide should be pounded up fine just before using. The sulphuric acid is also dangerous to handle, being of a very burning nature.

Directions for Using.

1. Close all ventilators and make the house as tight as possible. Fumigate after dark or in dull weather, never in bright sunlight. The plants should be fairly dry. No watering or spraying should be done on the day the plants are to be fumigated. The temperature of the house must not be above 60 degrees Fahr. Choose a dull, still night when there is very little wind.

2. Remove from the house any plants of Pilea microphylla (Artillery Plant), Tradescantia zebrina (Striped Wandering Jew), as the fumes injure these plants badly. Fragrant-leaved geraniums are also sometimes slightly injured, but as the white fly attacks these extensively, it is best not to remove them from the house. Any very young seedling plants had also better be removed.

3. Use old gem jars or open glazed earthenware jars. Metal or unglazed jars should not be used. One jar for every twenty feet in length for a house 15 to 20 feet wide should be used.

4. When ready to start fumigation, put into small paper bags the proper

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proportions of newly pulverized cyanide required for each dish. Set one of these (open) close to where each dish is to be placed. Then place in each dish, the proper proportion of water first, then add the proper proportion of sulphuric acid and set each dish in its position on the floor of the greenhouse. Make sure then that the door for exit is all right for getting out of the house quickly. Start at the farther end of the house from the exit and pour the powdered cyanide out of the bag into the farthestmost jar. Work your way back as quickly as possible until all the jars have received the cyanide, taking care not to inhale any fumes. Then get out of the door quickly and close it tightly. See that no one goes into the house for at least an hour. An hour's exposure is usually enough to kill the adult fly, or the house can be left closed up until the next morning. I have found an all night exposure the most successful if you are satisfied the temperature, etc., in the house is all right.

In the morning collect up the paper bags and burn them, also wash out and bury any sediment left in the dishes.

Three applications at intervals of about ten days will effectually rid the house of either white fly or black aphids. The successive fumigations as mentioned will kill off any of the adult white fly that escaped previously, as well as those that were in a larva or egg state, and that have hatched out since the previous applications. The larva or egg of the white fly cannot be destroyed effectually unless far advanced, and by using double the quantity of the materials as given per thousand cubic feet of

space. Doubling the quantity in this way will often injure many of the more tender plants, other than those I have mentioned. The double quantity of $\frac{1}{2}$ oz. cyanide, 1 oz. sulphuric acid and 2 oz. of water per thousand cubic feet space may be used to kill "thrip" on carnations, and also to kill the black aphid on chrysanthemums. Full blown flowers of carnations should, however, be cut before using it, as it sometimes bleaches the flowers. With chrysanthemums it is best to fumigate before the flowers open and not after the flowers open.

Strong fumigations with aphid punk or tobacco stems will kill the black aphid, but is not as effective as cyanide for exterminating the white fly. Unless the fumigation with tobacco for white fly is very heavy, it only stupefies them and does not kill them. Spraying the plants with cold water the next morning after fumigating is advisable.

Note.—Be careful not to use jars or vessels for any other purpose after once used for cyanide. Keep the cyanide in closely sealed jars, with glass stoppers, as exposure to the air weakens and wastes it. Be careful to keep cyanide away from children and animals, especially when pulverizing it, as the smallest particle is a powerful, deadly poison.

COMING MEETINGS.

Toronto, Can.—Canadian Horticultural Association convention Aug. 12, 13, 14 and 15.

Detroit, Mich.—S. A. F. and O. H. Convention at Acadia Hall, Aug. 19, 20 and 21. Secretary, John Young, 1170 Broadway, N. Y. City.

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OUTING OF THE FARQUHAR EMPLOYEES.

The fourth annual outing of the employes of Farquhar's store and nursery was held on Saturday, July 5. Through the courtesy of Mr. Charles Bradley, superintendent of the Farm and Trade School, the picnic was held this year at Thompson's Island. Nearly 125 of the employees and their families gathered at the City Point boat landing at 9 o'clock where a specially chartered boat was waiting to convey them to the island. Arriving there a ball game was immediately started between the store and nursery; it was a hotly contested game, the nursery winning by the score of 10 to 9. The feature of the game was the batting of Fletcher of the nursery team, with the bases filled in the last inning he drove a home run, winning the game. After the ball game dinner was served; the tables being laid on the lawn under the trees. During the dinner the Farm and Trade School band entertained by playing popular airs. After the dinner Mr. A. L. Dix, acting superintendent of the school, gave an address of welcome, also told in an interesting manner the history of the island. The athletic events:

100-yard dash for men, Fletcher 1st, Roemer 2nd.

50-yard dash for girls, Miss Fordham 1st, Miss Masters 2nd.

Three-legged race, Roemer-Fletcher 1st, Holsworth-Chisholm 2nd.

50-yard dash for men over 40, Davy 1st, Reed 2nd.

Throwing base ball for distance (girls), Miss White 1st, Miss Waunberg 2nd.

Potato race, Miss Fordham 1st, Miss Hintze 2nd.

Throwing ball for distance (men), Fletcher 1st, Roemer 2nd.

Pipe race, Reed 1st, Armstrong 2nd.

Egg race, Miss Hullen 1st, Miss Hintza 2nd.

Hurdle race, Fletcher 1st, Chrisholm 2nd.

The prizes for the different events were distributed by Honorary President J. K. M. L. Farquhar, and at 6 o'clock the party left for home.

The committee in charge was as follows: John W. Davy, chairman; James Armstrong, Walter Bartlett, Miss Betty Hintze, Harry Jenner, Harold Leary, Miss Mary Leonard, Miss Harriet Mullen, Ralph Chapman, Donaldson Smith, Frank Stead.

Officials — Starter, James Armstrong; announcer, William Gordon; umpire baseball game, Clarence Stone.

Judges—Alexander P. Dewar, Victor Nielsson, Patrick Fordham, George Cruickshank, Harry Jenner, Robert Welsh.

NEW YORK QUOTATIONS PER 100. To Dealers Only

		Last Part of Week ending July 12 1919	First Part of Week beginning July 14 1919
American Beauty, Special	3.00 to 35.00	3.00 to 35.00	3.00 to 35.00
" " Fancy and Extra	12.00 to 30.00	12.00 to 30.00	12.00 to 30.00
" " No. 1 and culls	2.00 to 10.00	2.00 to 10.00	2.00 to 10.00
Russell, Hadley	3.00 to 30.00	3.00 to 30.00	3.00 to 30.00
Killarney, Ward	2.00 to 6.00	2.00 to 6.00	2.00 to 6.00
Radiance, Taft, Key	3.00 to 25.00	3.00 to 25.00	3.00 to 25.00
Ophelia, Sunburst	8.00 to 10.00	8.00 to 10.00	8.00 to 10.00
Carnations	3.00 to 8.00	3.00 to 8.00	3.00 to 8.00
Cattleyas	20.00 to 50.00	20.00 to 50.00	20.00 to 50.00
Lilies, Longiflorum	10.00 to 12.00	10.00 to 12.00	10.00 to 12.00
Lilies, Speciosum	8.00 to 16.00	8.00 to 16.00	8.00 to 16.00
Callas	4.00 to 6.00	4.00 to 6.00	4.00 to 6.00
Iris	2.00 to 6.00	2.00 to 6.00	2.00 to 6.00
Lily of the Valley	2.00 to 6.00	2.00 to 6.00	2.00 to 6.00
Snapdragon	1.00 to 1.00	1.00 to 1.00	1.00 to 1.00
Pansies	1.00 to 1.00	1.00 to 1.00	1.00 to 1.00
Calendula	5.00 to 15.00	5.00 to 15.00	5.00 to 15.00
Stocks	2.00 to 6.00	2.00 to 6.00	2.00 to 6.00
Wallflowers	1.00 to 1.00	1.00 to 1.00	1.00 to 1.00
Mignonette	2.00 to 3.00	2.00 to 3.00	2.00 to 3.00
Sweet Peas	.75 to 1.00	.75 to 1.00	.75 to 1.00
Marguerites	1.00 to 2.00	1.00 to 2.00	1.00 to 2.00
Gardenias	6.00 to 25.00	6.00 to 25.00	6.00 to 25.00
Adiantum	.75 to 1.25	.75 to 1.25	.75 to 1.25
Gladioli	6.00 to 12.00	6.00 to 12.00	6.00 to 12.00
Asparagus Plumosus, & Spreng. (100 bunches)	15.00 to 30.00	15.00 to 30.00	15.00 to 30.00

WHOLESALE FLOWER MARKETS — TRADE PRICES — Per 100 TO DEALERS ONLY

	BOSTON July 14	ST. LOUIS July 14	PHILA. July 14
Roses			
Am. Beauty, Special	18.00 to 40.00	50.00 to 60.00	30.00 to 40.00
" " Fancy and Extra	12.00 to 20.00	25.00 to 40.00	20.00 to 30.00
" " No. 1 and culls	1.00 to 6.00	5.00 to 15.00	5.00 to 15.00
Russell, Hadley	4.00 to 18.00	4.00 to 5.00	10.00 to 25.00
Killarney, Ward	2.00 to 10.00	2.00 to 4.00	3.00 to 6.00
Radiance, Taft, Key	3.00 to 10.00	3.00 to 8.00	10.00 to 25.00
Ophelia, Sunburst	2.00 to 10.00	1.00 to 6.00	6.00 to 10.00
Carnations	.75 to 1.50	1.00 to 3.00	3.00 to 5.00
Cattleyas	50.00 to 75.00	50.00 to 75.00	50.00 to 75.00
Lilies, Longiflorum	16.00 to 25.00	18.00 to 25.00	20.00 to 25.00
Lilies, Speciosum	8.00 to 20.00	10.00 to 15.00	10.00 to 15.00
Callas	16.00 to 20.00	10.00 to 15.00	20.00 to 25.00
Iris	2.00 to 4.00	6.00 to 10.00	10.00 to 12.00
Lily of the Valley	16.00 to 20.00	10.00 to 14.00	8.00 to 10.00
Snapdragon	1.50 to 2.00	2.00 to 4.00	8.00 to 10.00
Pansies	.25 to 1.00	1.00 to 1.00	5.00 to 6.00
Calendula	1.50 to 2.00	2.00 to 3.00	2.00 to 3.00
Stocks	1.00 to 4.00	5.00 to 8.00	.50 to .75
Wallflowers	.35 to .50	1.00 to 1.00	1.00 to 1.00
Mignonette	2.00 to 4.00	2.00 to 4.00	3.00 to 4.00
Sweet Peas	.25 to 1.00	.20 to .50	.50 to 1.00
Marguerites	1.00 to 4.00	1.00 to 2.00	.50 to .75
Gardenias	16.00 to 25.00	10.00 to 12.50	1.00 to 1.50
Adiantum	1.00 to 1.50	10.00 to 12.50	1.00 to 1.50
Gladioli	4.00 to 8.00	8.00 to 6.00	6.00 to 10.00
Asparagus Plumosus, & Spreng. (100 Bchs.)	25.00 to 75.00	25.00 to 75.00	50.00 to 60.00

WHOLESALE FLOWER MARKETS — TRADE PRICES — Per 100 TO DEALERS ONLY

	CINCINNATI July 14	CHICAGO July 14	BUFFALO July 14	PITTSBURG July 14
Roses				
Am. Beauty, Special	40.00 to 50.00	50.00 to 60.00	30.00 to 40.00	18.00 to 20.00
" " Fancy and Extra	30.00 to 35.00	35.00 to 40.00	20.00 to 30.00	18.00 to 25.00
" " No. 1 and culls	8.00 to 10.00	12.00 to 15.00	3.00 to 10.00	10.00 to 15.00
Russell, Hadley	8.00 to 15.00	5.00 to 30.00	6.00 to 10.00	6.00 to 9.00
Killarney, Ward	3.00 to 10.00	5.00 to 15.00	3.00 to 8.00	4.00 to 12.00
Radiance, Taft, Key	6.00 to 15.00	5.00 to 25.00	3.00 to 10.00	6.00 to 12.00
Ophelia, Sunburst	5.00 to 10.00	5.00 to 15.00	1.00 to 2.50	6.00 to 12.00
Carnations	2.00 to 3.00	0.00 to 12.00	2.00 to 3.00	3.00 to 3.00
Cattleyas	60.00 to 75.00	60.00 to 80.00	75.00 to 85.00	1.00 to 125.00
Lilies, Longiflorum	15.00 to 20.00	15.00 to 20.00	14.00 to 20.00	10.00 to 12.00
Lilies, Speciosum	12.00 to 15.00	12.00 to 18.00	15.00 to 20.00	20.00 to 25.00
Callas	6.00 to 8.00	15.00 to 20.00	3.00 to 5.00	4.00 to 6.00
Iris	6.00 to 8.00	5.00 to 8.00	3.00 to 10.00	10.00 to 12.00
Lily of the Valley	3.00 to 10.00	10.00 to 20.00	2.00 to 3.00	1.00 to 1.50
Snapdragon	1.00 to 1.50	.50 to 1.00	.50 to 1.00	4.00 to 6.00
Pansies	2.00 to 3.00	3.00 to 5.00	1.00 to 3.00	3.00 to 4.00
Calendula	4.00 to 6.00	6.00 to 12.00	2.00 to 5.00	1.00 to 1.00
Stocks	1.00 to 1.00	1.00 to 2.00	1.00 to 1.00	1.00 to 1.00
Wallflowers	6.00 to 8.00	6.00 to 8.00	2.00 to 5.00	3.00 to 4.00
Mignonette	.75 to 1.00	1.00 to 2.50	.50 to 1.50	.75 to 1.50
Sweet Peas	2.00 to 3.00	1.00 to 2.00	.50 to 1.00	3.00 to 3.00
Marguerites	15.00 to 25.00	15.00 to 20.00	1.00 to 1.00	1.00 to 1.00
Gardenias	1.00 to 1.00	1.00 to 1.25	.50 to .80	1.50 to 2.00
Adiantum	6.00 to 12.00	5.00 to 12.00	8.00 to 10.00	6.00 to 12.00
Gladioli	25.00 to 50.00	50.00 to 100.00	35.00 to 50.00	60.00 to 75.00
Asparagus Plu. & Spreng. (100 Bchs.)				



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The fifth annual convention of the Texas State Florists' Association is now a matter of history. Although no special rates had been made by the railroads, yet about 65 of the Texas florists were in attendance at Austin. The treasurer's report showed that the Association was fairly prosperous from a financial standpoint, as the treasury yet had in it enough funds to pay all outstanding accounts and contribute \$50.00 toward the S. A. F. Publicity fund and yet leave ample funds to bear all expenses of the association for another year.

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10	20 in.	\$3.25	\$37.50	\$287.50
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60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

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NEW BOOKS.

Smith's Chrysanthemum Manual, Fourth Edition.

Smith's Chrysanthemum Manual, issued this year, is one of the most valuable new publications of the kind which a chrysanthemum grower can possess. It embodies all the good material of the previous editions, with

much extra matter. Many of the important chapters have been revised and enlarged so as to embrace more complete details. Considering the fact that Mr. Smith has given his undivided attention for twenty-five years to the improvement of the chrysanthemum and its culture, it is not strange that his book should be of value, not only to the florist but also to the gardener. Besides relying upon his own work and observations, Mr. Smith has had the advantage of other men's experience, particularly that of T. D. Hatfield, of the Hunnewell estate in Wellesley. One of the particularly good illustrations is a specimen plant grown by I. L. Powell, at Millbrook, N. Y.

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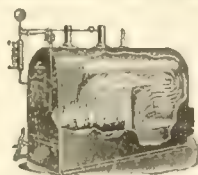
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By M. G. KAINS

Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

After a few pages of introduction the author discusses Plant Physiology as related to pruning. A chapter takes up the Philosophy of Pruning, itself a very interesting subject. Then follows a classification and clear discussion of Buds, very fully illustrated from life. How Wounds Heal is an exceedingly interesting chapter, as are also those on Prevention and Repair of Mechanical Injuries, Pruning Nursery Stock, Young Trees, Mature Trees and Odd Methods of Pruning and Training, Rejuvenating Neglected Trees and Practical Tree Surgery.

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By M. G. KAINS

We have had many inquiries from time to time for a reliable and up-to-date book on plant propagation, but were always at a loss to find any publication that we could recommend. The subject has been dealt with in fragmentary manner only in books that have come to our notice. So it is well that this new work has been issued, especially as it is both comprehensive and practical, and it should meet with a ready sale among plantmen, nurserymen and gardeners. There are nineteen chapters covering in detail topics of germination and longevity of seeds, propagating by buds, layering, cuttings, grafting, etc., fruit tree stocks, scions, etc., and there are eight pages of condensed cultural instructions in tabulated form, covering annuals and perennials from seed, woody plants, evergreens, vines, bulbs and tubers, greenhouse and house plants, ferns, palms, water plants, orchids and cacti. The illustrations are numerous, comprising 213 figures and halftone plates. There are 322 pages well bound and on heavy paper, teeming with helpful information. It is a book which no cultivator can afford to do without. It is worth many times its price. Copies can be supplied from the office of HORTICULTURE at publisher's price, \$1.50.

HORTICULTURE PUBLISHING CO.
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In Writing to Advertisers kindly mention Horticulture

HORTICULTURE

Vol. XXX

JULY 26, 1919

No. 4

ROSES

OWN ROOT, 3-INCH, \$15.00 PER 100
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Muscoca and Smithii, 5-inch pots.....	.75 each
Smithii, 6-inch pots.....	1.00 each
Elegantissima compacta, 8-inch pots.....	2.00 each
Elegantissima, and Elegantissima compacta, 10-inch pots.....	4.00 each
Harrisii, 8-inch pots.....	2.00 each
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Society of American Florists and Ornamental Horticulturists

National Publicity Campaign.

This week we are recording a list of contributions to the Publicity Fund, approximating something over \$1200. This is a decided improvement over the lists of the past several weeks, but only about half of what an average list should be for every week in the year if we are to reach our goal of \$100,000. As our fund stands now, we are many thousands of dollars short of half the fund aimed for, and are more than half way through the year.

Next month our Publicity Committees will make their reports to the Society's Convention in Detroit, and unless contributions become more active in the intervening weeks, they will not be able to report the collection of at least half of the amount of the fund.

At the convention the committees will meet jointly to discuss plans to continue the publicity work during the fall and winter season, the summer season having already been provided for. What amount of money are we going to place at their disposal for immediate use? It must be remembered that the production of flowers throughout next season promises to be abnormally large, consequently calling for greater effort to improve the demand for them, if we are to avoid gluts and obtain remunerative prices. Publicity, and lots of it, is needed more than ever. To get it we must have money. We are no longer buying "a pig in a poke." We know that we get a magnificent return for the money we spend, and the more we spend the greater the return.

We are addressing particularly those florists who have not yet sent in subscriptions. It is beyond our conception that they do not intend to contribute, but why not send them in now, thus not only relieving the committees of uncertainty but permitting them to make their publicity plans in the best interests of all. The plans now maturing may call for the immediate appropriation of as much as \$20,000. If the committees do not find such an amount available, how are they going to finance the bills? Your good intentions will not help them any, unless you cash them in, by remitting to the secretary, without delay, your cheque for the amount you have decided to give. Keep the ball a-rolling.

Do not for one moment think that because you have seen a big list of subscribers, to the amount of several thousand dollars, that amount is waiting to be expended. Our committees put the money to work as fast as it piles up. They have no thought of using the funds to produce an income which shall supply the publicity; they spend the fund itself, every penny of it. So when you hesitate you delay the game. What is \$100,000 among 20,000 florists? A thousand fruit growers recently raised that amount in a few weeks.

Just Take These Facts to Heart

The campaign is a good thing for you and everybody else in the trade. It is doing what it was expected to do—increasing the demand for flowers. It is endorsed by all the live-wire florists of the country. It is waiting your support, through your contribution.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

Joliet Floral Co., Joliet, Ill. (1 yr.)	\$10.00
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The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

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4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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GERANIUMS—Special offer—1500 Poitevine, 2 1/2-inch Rose Pots; 1500 Ricard, 2 1/2-inch; 500 S. A. Nutt, 2 1/2-inch. The above as large as 3-inch. Particularly fine for stock plants, \$5.00 per 100; \$45.00 per 1000.		
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Boddington's

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AN EFFECTIVE COMBINATION SPRAY.

Considerable interest is being shown in the combined insecticide and fungicide which is now being introduced under the name of Sulco-V. B. It has been used in various parts of the country and in the tropics for the past eight years and seems to be very efficient, as well as extremely convenient, an important matter to the gardener and the flower grower. The formula is based on an old idea, to be sure, but the old time bother of home preparation has been eliminated.

Sulphur-fish oil and carbolic acid are scientifically and mechanically combined, so that they will readily mix with water and prevent or control the various scale insects, plant lice and many fungus diseases. Nearly everybody knows of the efficacy of fish oil soap, and the various forms in which sulphur has been applied to plant life, but it remained for Charles Fremd, a well known horticulturist and chemist of New York State, to combine the fish oil and sulphur plus the carbolic, which is in itself a deadly insecticide

and germicide, but so scientifically combined with the other materials that it will not injure tender plants or the operator handling the spray machines.

PHILADELPHIA.

W. J. Sherry, of Dreer's, has been spending his vacation in New England and has covered that territory from R. I. to N. H. He writes from Wollaston, Mass., July 16th, "Am having a delightful time. This part of the United States is beautiful indeed."

Recent Philadelphia visitors have been Alexander Forbes, A. Forbes & Co., Newark, N. J.; C. M. Guelph, Jerome P. Rice & Co., Cambridge, N. Y.; C. P. Hart, Whitney-Eckstein Co., Buffalo, N. Y.; George W. Evenden, Williamsport, Pa.; T. B. McClintock, Scranton.

Fred Michell, Jr., is laid up with a broken ankle inflicted by a slip on the sidewalk while running for a car.

Elmer J. Weaver, our florist-expert, was around this week selecting his territory down in the "neck" for his colony to get the best that's going in the August-September honey flowers.

HORTICULTURE

Vol. XXX

JULY 26, 1919

No. 4

MORE ABOUT NOVELTIES AND NURSERYMEN

MR. WILSON'S VIEWS.

Dear Sir: Under the above caption in *HORTICULTURE*, July 12, there appears a letter from Mr. Wyman of the Framingham Nurseries, and an extract from the *Garden Magazine*, written by Mrs. Louise B. Wilder. Now Mrs. Wilder's experience is exactly similar to my own. In pre-war times not a week passed but what I had to refer applicants for hardy woody plants to the nurserymen of Europe or Japan. In 1915-1916, when I contributed a series of articles to the *Garden Magazine*, inquiries to which no other answer could be given were almost of daily occurrence. Getting tired of answering such letters I took occasion in the March number of 1916 to publish as a prefatory note to an article on Japanese Cherries and Asiatic Crabapples my measured opinion on the matter. What I wrote then holds good today and I reiterate it.

"I wonder if you know how often you mention a wonderful tree or vine which NO catalogue that I have ever seen (and I have dozens) ever mentions, and I want to ask do you write expecting us to buy these things or are you merely telling us of their beauties" Thus writes a correspondent from Indiana, squarely putting a question which very many others have asked in less exact words since this series of articles began last June. This being the case it would seem that the time had come for some definite reply.

Now, with very rare exceptions, the plants mentioned in these articles have been in commerce anywhere from five to one hundred years. With deliberate intent I have abstained from detailing the beauties of plants which are not purchasable. The future can well be left to take care of those. Certainly I write for the purpose, and in the hope, of inducing garden lovers to grow in their gardens a greater variety of beautiful hardy woody plants. Also, I have another purpose which I will divulge in due season. So much for that part of my

correspondent's question which has direct reference to myself.

As to the other part: it is for those who make a business of dealing in this class of plants to give answer. Yet, in fairness, it may be said that we can scarcely expect the nurserymen to exhibit all the push and enterprise necessary to give to American gardens all the variety of good things they should possess. Amateurs too must do a share and this may in a measure be accomplished by dunning their favorite nurseryman for the particular plants desired. We are really only at the beginning of things and the amateur must take a lead and insist on his dealer supplying the plants he desires; not merely those which the dealer may happen to have in stock. Heretofore the position has been that of the dealer as nurse, and the amateur as child. But horticulture in this country is fast emerging from its swaddling clothes; indeed, it may be said to be well into the adolescent stage in many states of the union. This means that the lover of plants must, and will, have a larger voice in the variety that shall be grown in gardens. Increased knowledge of, and love for, plants of every kind is the leaven that will conduce to the upbuilding of American gardens. The solution of the present problem will be found in both amateur and dealer becoming more and more progressive."

As a nurseryman Mr. Wyman should know more about the business morality of the nursery trade than an outsider like myself but I am painfully surprised to read his indictment. Yet what he suggests may happen does not appear to have hindered the rose, gladiolus, peony and carnation specialists from raising and distributing novelties in such quantities as to make this country famous the world over for these products. The patent rights which he would have to protect novelties have not been found necessary in Europe nor elsewhere. Surely Mr. Wyman does not claim that business morality among the nurserymen here is of a lower order than that of other countries.

In England, the greatest publicity agent the nurserymen have is the Royal Gardens, Kew. In this country it is the Arnold Arboretum. In their own spheres the collections of these institutions are permanent and perennial exhibitions of all that is best in garden material. The garden-loving public visit them and make notes of what they like best and then turn to the trade to supply their wants. Now it goes without saying that such collections as those at Kew and at the Arnold Arboretum contain many plants which no nurseryman can profitably carry in stock, also novelties which to date he has had no opportunity of acquiring. When these are asked for by intended customers there is no disgrace admitting that they are not to be obtained. But after eliminating these the truth remains that in America the seeker after a majority of the beautiful hardy plants which year after year display their garden value is doomed to disappointment. It is the apathy, indifference, and I am afraid, ignorance of so many nurserymen that taxes the patience of those desirous of seeing American gardens stocked with all that is really worth while. The garden public were never so insistent for the best of garden material. Surely it is to the interests of the nurserymen themselves that this growing want be properly taken care of. More of the energy and enthusiasm which characterized the famous old firms of Parsons, Ellwanger & Barry, Hovey and others would not be amiss today.

E. H. WILSON.

AS MR. COE SEES IT.

Gentlemen—The writer reads with very keen interest the article "Novelties and Nurserymen" prefacing *HORTICULTURE* July 12th issue. In the long run successful Nurserymen in common with other business men probably do reflect the law of supply and demand as an intermediary. The business man who takes the liberty to deviate from this position may either suffer or profit or possibly both at the same time, depending, of course, upon one's definition of the terms. At the present time

there seems to be no way by which the introducer of a new horticultural product can control its propagation or sale after it once leaves his hands, either by purchase, gift or "theft." For this very reason the commercial horticulturist of mature experience is often loath to attempt the introduction of a novelty, however certain he may be impressed with its merits.

Legislature in our country may some time be so enacted as to encourage the introduction of new things horticulturally more directly from a view point of a more stable cash return. Let us hope that such legislation is not far distant.

There are those in the trade whose experience leads them to believe that they have profited, broadly speaking, by the liberal use of various publicity methods in introducing horticultural novelties of real merit even though a careful checking up of accruing sales of the novelty itself may not have, in many instances, shown up on the favorable side of the ledger. It is a distinction with a very definite business asset to have been the introducer of a tree, plant or seed with really meritorious qualities and usually carries with it a substantial general reward. The beautiful hardy garden lily from China recently introduced and the altogether lovable Rosa Hugonis, as well as several other recent introductions which could be mentioned, are instances to point. It may be that possibly none of these introductions have strictly vindicated themselves as profitable introductions from an immediate cash standpoint, but what a splendid publicity asset it is to any concern who deliberately, under existing circumstances, is far seeing enough to liberally devote both time and money in bringing to the attention of the horticultural world a really valuable introduction.

There are too, even among the horticultural fraternity who depend for their livelihood on the income derived from their business, those who not only intensely love their business, but believe that theirs is a great opportunity to assist in making the world more useful and beautiful and who are constantly willingly sacrificing both time and money and personal effort with this end in view. To this class the introducing of a truly meritorious novelty is not one altogether a question of dollars. After all, does not our present lack of legal protection of objects horticulturally lift the whole field of horticultural research out of the realm of mere commercialism and give the entire country a

more free opportunity to try out new things and more quickly determine their actual local merit, than would be the case were there legal restriction interfering with their dissemination. As to the plant breeder himself, the question of profit from any monetary standpoint, is often quite a secondary consideration. Possibly Louise B. Wilder, writing in Garden magazine for July, is not aware that there are many enthusiastic nurserymen and other plant dealers who will gladly extend their list of offerings to an almost unlimited extent provided that sales can be realized which will, even to a limited degree, compensate them. The American buying public, up to now at least, has represented a very different standard as compared with the European purchaser, Great Britain especially, where so large a proportion of the people, from the smallest hamlet owner up, take the greatest interest in an extended list of interesting plants, that a substantial demand exists, and the plant merchant very naturally stocks up accordingly.

It is quite natural that the comparative few here in America who really want to purchase extended lists of unusual varieties have been impressed with some of the European catalogues and have accordingly sent their orders across the water, an easy thing to have done. This practice, in itself alone discouraged the American plantmen in carrying long lists. Now that plant import prohibition is in force, conditions will be somewhat different. Just as soon as the public wants any special thing in the plant line and in quantity enough to make it an attractive business proposition to the merchant, it is quite sure to be available.

It is hardly correct to charge the very limited lists offered by the average nurseryman to the "blindness of the dealers." It is quite the reverse, the "dealers" suffering with "blindness" are the ones who have allowed their enthusiasm to overrule their good judgment and have, though their own personal enthusiasm, propagated an extended list of varieties only to find that the demand for these amounted to practically nothing. There is good reason to hope and believe that here in America an increasing number of plantmen will yearly find it worth while to add to his list of varieties, however, but if the past is any criterion, much of the profit of his effort will need to be charged up, as is the case with the introduction of novelties, to general reputation and the love of doing it, rather than to any immediate profit that will show up as

a cash credit on an accurately kept ledger.

ERNEST F. COL.

New Haven, Conn.

The Elm City Nursery Co.,
Woodmont Nursery, Inc.

BOSTON'S CONVENTION PARTY.

There will be something doing this year at the S. A. F. convention, to be held at Detroit, August 19, 20, 21. A Boston party is being made up to go via Boston & Albany to Buffalo, where the day will be spent in sight-seeing. Buffalo is but a short way from Niagara Falls. From Buffalo to Detroit by steamer, arriving at 8 o'clock Tuesday morning, August 19.

Train leaves South Station, Boston, Sunday, August 17, at 4.45 p. m., Framingham 5.19, Worcester 5.55, Springfield 7.20, Pittsfield 9.11, Albany 10.40, arriving at Buffalo 6.50 a. m. Monday.

Boat leaves Monday 6 p. m., arrives Detroit 8 a. m. Tuesday.

Fare to Buffalo.....	\$16.11	
Lower berth.....	2.70	
		\$18.81
Fare from Buffalo to Detroit, boat	4.32	
Stateroom, two berths, accommodating two or three people	3.50	
		7.82
		\$26.63

Meals a la carte.

To those who wish to go direct, a train may be had leaving Boston Monday at 2 p. m., arriving at Detroit at 8.10 next morning. Fare all rail \$24.28; lower berth \$4.32. Reservations should be made at once. Hotel Statler will be the headquarters of the society.

Notify E. Allen Peirce if you wish to be included in this party that reservations may be made early on train and boat.

The New York delegates leave via D. L. & W. Ry. at 8.30 August 17, arriving in Buffalo at 7.30 Monday morning, and going on with the Boston delegation.

LADIES' S. A. F.

Mrs. C. H. Maynard gives notice to amend the Ladies' S. A. F. Constitution and By-Laws Article VI, Section 4, by adding after words President and Secretary, "She shall give bonds in such sums as the Executive Board may from time to time deem sufficient. The expenses of furnishing such bonds to be assumed by the society.

Mrs. H. G. BERNING, Secy. L. S. A. F.

NEWS AND COMMENT

NEW RHODODENDRON MISS LOUISA HUNNEWELL.

The Massachusetts Horticultural Society has awarded a Gold Medal to Mr. T. D. Hatfield, superintendent of the Walter Hunnewell Estate at Wellesley, for the new hybrid Rhododendron Miss Louisa Hunnewell. It is a cross between Rhododendron (Azalea) japonicum and Rhododendron sinense.

Rhododendron japonicum is salmon red, R. sinense is clear yellow, and the new hybrid is orange yellow. R. sinense is never bud-hardy, R. japonicum is quite hardy, and so is the hybrid. Mr. Hatfield made the cross under glass about eight years ago. Hundreds of seedlings have been raised with practically no difference in habit or color. In looking over a large bed of them in bloom no difference is discernible. It is considered a valuable addition to the list of hardy rhododendrons.

WM. P. RICH
Secretary.

ANNUAL MEETING OF HENRY A. DREER CO.

At the annual meeting of the stockholders of Henry A. Dreer, Inc., held at Riverton, N. J., July 19th, 1919, the following directors were elected: Jacob D. Eisele, Herbert G. Tull, J. Otto Thilow, George D. Clark, George A. Strolein, James C. Clark and Chas. H. MacKubbin.

After the adjournment of the stockholders meeting, the directors organized by electing the following officers: Jacob D. Eisele, president; Herbert G. Tull, vice-president and treasurer; J. Otto Thilow, secretary; James M. Vogdes, assistant treasurer.

OBITUARY.

George Anderson.

George Anderson, a well-known rose grower, passed away at his residence, 52nd and Woodland avenue, on the 19th inst. He came from his native heath near the Solway Firth in Scotland to Philadelphia in the early seventies. He was then a young man and a trained gardener. Among his first associations he gained much American experience at the famous Buist nurseries at 65th and Elmwood avenue. He was an active figure in the landscape and gardening work of the Centennial in '76. After that he

started in business for himself on a five-acre lot, which was then open country at 52nd and Woodland avenue, and during these 40 or more years built up a fine business, and brought up his family of nine; and by hard work and native shrewdness, and unswerving honesty, amassed a competence, and became one of the leaders in his craft. Whatever crop he grew—and he grew them nearly all, as plant and flower fashions changed and as the years rolled by—he was generally looked up to as a leader. Of late years he went in more for rose growing than for other marketable crops, and his fame in that connection reached far beyond local circles. Visitors to Philadelphia from Maine to California made George Anderson's one of their first places of call to get a line on first how he did things, and to get the latest wrinkles from a canny Scot—who never said a great deal but could generally show the goods. Mr. Anderson was keen in business but had also the broader side and loved to mingle with his fellow craftsmen in their hours of play. In the bowling heyday he was one of the crack bowlers of the Florists' Club for 20 years, and in the Gun Club few could equal him as a crack shot at the targets. Mrs. Anderson and all of his family of nine children except one daughter survive him. This daughter, Georgianna, died in the hospital only about a month ago. Mr. Anderson was a clean, careful liver, and enjoyed the best of health all his life. He was the last man any of his friends would have looked for to have a stroke—lean, wiry and hard grit; but the first one got him three years ago, and the third some three weeks back. So one never can tell. Be as careful as you can, you will pass on when your time comes—King David or no King David. Mr. Anderson was 71 but looked good for another 20 at least.

GEORGE C. WATSON.

Charles Mecky.

Charles Mecky died at his home in Philadelphia on the 17th inst. He was a well-known florist and devoted his range principally to the growing of bedding and Easter plants. He was located for many years at 17th and Erie avenue, but about ten years ago moved to the Limekiln Pike in Germantown where he built an up to date

range and continued along the same lines. He was 68 years of age and highly respected by all who knew him. His son succeeds him in the business.

Charles E. Wingate.

Charles E. Wingate, one of the oldest resident of Lawrence, Mass., and a veteran florist, is dead at his home, 8 Fulton street, after an illness of three months, following an attack of influenza.

Mr. Wingate was well-known as a hunter and had spent considerable time in the Maine woods. He was also a collector of Indian relics. Some of the photographs he took while in the woods have been purchased by the Boston & Maine railroad for use in the development of their lines in Maine.

NEW YORK.

Retail flower stores in Buffalo will be closed all day Sundays this summer, starting July 13, says a statement from the Retail Florists' Association. According to the florists this move is taken to give the employees a holiday and to bring the business up to the standard of other lines of trade.

The United Cut Flower Co., of Manhattan, has increased its capital stock for \$15,000 to \$60,000.

Arthur Newport, for 24 years a florist at the Grove Street Greenhouse in Oneonta, committed suicide by inhaling illuminating gas. Prolonged poor health is said to be the cause. He was born in England in 1866 and came to this country when five years of age. He leaves three unmarried daughters.

NEW JERSEY.

Mrs. Caroline Kelly, widow of the late Commissioner James E. Kelly, of Jersey City, has embarked in the florist business and opened a store. Mrs. Kelly is the mother of Frances Kelly, of war stamp fame who traveled on horseback over the entire state of New Jersey selling thrift and war savings stamps while the war was in progress during which she sold nearly a half million dollars worth.

NEW ENGLAND.

T. Richard of Salem, Mass., is working at the State Foresters' nursery in Bridgewater, and is assistant foreman of the nursery. He has charge of the laying out of the nursery beds and the plotting of the species. The nursery contains about 700,000 coniferous transplants. Richard intends to make forestry his life work.

HORTICULTURE

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Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

We find that some of our friends have not yet learned that **HORTICULTURE** has moved to new offices, and are still going to the Summer Street address. The new offices are at 78 Devonshire Street on the top floor, where there is plenty of light and air and where all our subscribers and friends will be heartily welcomed.

Omit
 Dr. Marlatt

It is in the air that Dr. Marlatt, chairman of the Federal Horticultural Board, is to be invited to address the S. A. F. & O. H. convention at Detroit, next month. If any plans of this sort are under way it is to be hoped that the better judgment of those arranging the program will prevail and that Dr. Marlatt will not be placed in the false position of appearing in a friendly way before a body of people most of whom he has frankly and repeatedly antagonized. In **HORTICULTURE**'s opinion this would be a grievous mistake. It would seem to outsiders as though the florists had been won over to the Horticultural Board's point of view in regard to the plant exclusion order.

Now it was Dr. Marlatt who took a prominent part in misleading the florists at the meeting in Washington, May 18, 1918, when he led them to believe that the proposed quarantine would not be put into effect for from three to five years. The florists and ornamental horticulturists have already had enough of Dr. Marlatt, and his obedient board. We cannot see that any further statement which may come from him or from them will be of any value to the trade. Dr. Marlatt would appear at Detroit primed for the occasion with a great mass of statistics and claims which it would be difficult to refute on the spur of the moment without time to

look into the records. It is perfectly certain that no discussion which might follow would be of any benefit whatever. The Horticultural Board has done its worst, and shows no disposition to compromise or arbitrate. The one way to obtain relief from their arbitrary ruling will be to appeal to higher powers. This will be done.

Dr. Marlatt and his board have had their innings. The florists and growers of the country should consider that they are through with both the board and its chairman. The less attention which is given them in the future the better will it be for the trade. The board thrives on publicity and has been given too much notice already. It is certainly to be hoped that a good program at Detroit will not be marred by the presence of Dr. Marlatt and the confusion, not to say illfeeling, which would almost certainly arise from his presence on the platform.

About
 coal

It is a little difficult to accurately determine the situation as to soft coal. Only a few days ago the charge was made in Congress that a feeling of apprehension was being built up artificially in order to increase the present demand. At any rate, some of the papers have been publishing articles purporting to show that there is likely to be a shortage in soft as well as in hard coal. Nevertheless it is a fact that there is plenty of soft coal on the market at the present time. Indeed, dealers in some places have been offered a discount on the established price if they would put in a large supply. The trouble seems to be largely in the matter of storage. Shipping is likely to be difficult after cold weather comes. Anybody who has anything to do with the railroads or the boat lines at the present time will feel perfectly safe in making such a prediction. The coal can be obtained now in unlimited quantities but there are no facilities for storing it in the sheds of the dealers. Later there doubtless will be enough coal at the mines, but then will come the matter of delayed transportation. Altogether, therefore, it would reasonably be wise for greenhouse men to put in at least a part of the supply needed for next winter. Under conditions as they used to be, lower prices might be expected, but in the present chaotic condition of business affairs, with everybody looking for a chance to grab an extra dollar, the law of supply and demand, like some other supposed economic laws, seems to have been suspended.

Here is a Good Suggestion

Gibsonia, Pa., July 14, 1919.

Those that suffer from insults or depredations of autoists from the cities I would advise to take down the number of their license tags, get their names and addresses from the State Highway Department, which is gratis and not much trouble, then either write them to come and see you or else enter suit against them.

We have in the past suffered somewhat from some of those people as our place fronts a much frequented auto road and some of them would pluck flowers, such as peonies and roses when they are in bloom, or commit other depredations.

We took the numbers of their license tags and wrote them to come to our office unless they wished to be prosecuted.

Each of them did come, very meekly apologized and promised never to do it again.

Yours truly,

F. BURKI.

THE
PINK BEAUTY
(Burpee's)



Burpee's Sweet Peas

The Twenty-Two Best Winter Flowering Spencer Sweet Peas for Florists

The first Spencer Sweet Pea in existence was brought to America by W. Atlee Burpee. Since then the House of Burpee has introduced over two hundred distinct new varieties each an improvement on the past. And by constant hybridizing for the last ten years we have developed the new Fordhook Early Flowering strain of Spencer Sweet Peas. We can now offer you all the finest colors in the Early or Winter Flowering type of Spencers—everything offered is grown on our own Floradale Farm in California. The House of Burpee is recognized as the **American Headquarters** for Sweet Peas.

3390 EARLY SANKEY (BURPEE'S). This truly magnificent white was awarded a special Silver Medal when exhibited at the great International Show in New York, March 20, 1915, also Certificate of Merit at the Spring Show of the Pennsylvania Horticultural Society, Philadelphia, March 23, 1915. Black seeded. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3392 IMPROVED EARLY SNOWSTORM (BURPEE'S). The result of a cross between King White and Yarrowa, it embodies the best qualities of those two varieties and easily eclipses all early-flowering white Sweet Peas to date. The flowers are of Yarrowa size, but finer form, as the standard does not reflex but is magnificently bold, though charmingly waved. A vigorous grower, the immense flowers are invariably borne in fours on very long stems. Awarded Certificate of Merit at the International Show, New York, March 20, 1915. Our Improved Snowstorm is so immeasurably superior to our original Snowstorm that we have now discarded the latter. Improved Snowstorm is the last word in Early-Flowering White Sweet Peas. Pkt., 10c; oz., \$1.50; ¼-lb., \$4.50; lb., \$15.00.

3342 EARLY CANARY BIRD (BURPEE'S). This is a splendid, rich, deep cream or primrose colored self. The flowers are of great size, beautifully waved, and usually borne three or four on a stem. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3348 EARLY DAYBREAK (BURPEE'S). The flowers are much frilled or waved, of largest size. The color is a splendid shade of rich rose-pink on cream ground, becoming deeper toward the edge of standard and wings. The entire flower is lightly suffused with salmon. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3376 EARLY LOVELINESS (BURPEE'S). The color is white, the entire flower being suffused soft pink and the edges distinctly pitted with rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3351 EARLY ENCHANTRESS (BURPEE'S). It is a bright rose-pink, becoming deeper toward the edges of standard and wings, gradually softening in tone toward the center of the flower. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3383 EARLY PINK BEAUTY (BURPEE'S). The color is soft rose pink on white ground, richer toward the edges, gradually softening in color as it reaches the center of standard and wings. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3344 EARLY CHERRY RIPE (BURPEE'S). A particularly bright and taking color and quite new in this section. It might be described as a glowing cherry or salmon-cerise self. Awarded Certificate of Merit at the International Spring Show, New York, March 20, 1918. Pkt., 10c; oz., \$2.50; ¼-lb., \$7.50; lb., \$25.00.

3381 EARLY ORANGE BEAUTY (BURPEE'S). Similar in color to Helen Lewis, therefore a glowing orange-scarlet with softer colored wings. Extremely free and early blooming, valuable alike for culture under glass or in the open, as it withstands the sun and weather well. Pkt., 14c; oz., \$3.00; ¼-lb., \$9.00; lb., \$30.00.

3362 FORDHOOK ROSE IMPROVED (BURPEE'S). Quite distinct from our original Fordhook Rose. The flowers are of immense size, usually borne in threes and fours on very long stiff stems. In color similar to the well-known George Herbert. A pleasing shade of rosy carmine. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3374 EARLY KING (BURPEE'S). The finest early-flowering crimson. The flowers are of great size, perfect form, averaging fully two inches in diameter. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3393 EARLY SPLENDOR (BURPEE'S). A magnificent new deep rose self. The rich rose-crimson color is accentuated by the distinct white blotch at the base of standard and wings. The flowers are of great size, usually borne in fours on very long stems. Similar in color to the Summer-flowering Rosabelle. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3386 EARLY ROSY MORN (BURPEE'S). Flowers grown under ordinary field culture have measured fully two inches in diameter. The flowers are usually borne in threes or fours on stiff, long stems. Color, a pleasing shade of rose with crimson-scarlet standard. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3375 EARLY LAVENDER KING (BURPEE'S). A first-class lavender has been much wanted in this type, therefore we have great pleasure in offering the new Lavender King. This glorious new variety is a rich, true, deep lavender throughout. Similar in color to the summer-flowering varieties, Burpee's Orchid and R. F. Felton. The flowers are of large size, beautifully true waved form, and borne in threes and fours on stems of great length. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3338 EARLY BLUE-BIRD (BURPEE'S). This is a charming shade of blue. Somewhat deeper than Wedgewood, but more of a true self, especially as the flower ages. In our opinion, the best blue for indoor culture. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3399 EARLY ZEPHYR (BURPEE'S). This is a delightful shade of pale blue or lavender. It might be briefly described as a silvery blue self. An extremely dainty and charming variety. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3380 EARLY MAUVE BEAUTY (BURPEE'S). Color a pleasing shade of rosy mauve. The flowers are of immense size, often measuring two and one-half inches in diameter, yet exquisitely waved and of best Spencer form. A strong, vigorous grower and very free flowering. Charming under artificial light. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3346 EARLY DAINTINESS (BURPEE'S). This has always been a favorite since it was first exhibited in 1915, when it was certificated. We have only now been able to work up a sufficient stock to offer to our friends. A strong grower, with flowers of largest size and usually produced in fours. Color, pure white edged rose. Similar to Summer-flowering Dainty. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3352 EARLY EXQUISITE (BURPEE'S). The ground color is a soft shade of primrose, the edge of the standard and wings being beautifully "pitted" with deep rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3361 FORDHOOK PINK AND WHITE (BURPEE'S). This is similar to the old Blanche Ferry, having a bright, rosy-pink standard with white wings, lightly suffused rose. Pkt., 7c; oz., 60c; ¼-lb., \$1.80; lb., \$6.00.

3398 YARROWA. The flowers average two and one-half inches in diameter; many are duplex or double. The color is a bright rose-pink with a clear, creamy base. Our stock of this popular Australian variety is absolutely true. Grown by us from seed procured direct from the introducer. Pkt., 7c; oz., 75c; ¼-lb., \$2.25; lb., \$7.50.

3357 EARLY FANTASY (BURPEE'S). Striped and marbled with rich rose-pink on a creamy white ground. Exceedingly bright and it makes a telling bunch when cut. Extremely free and a continuous bloomer, the flowers usually borne in threes and fours on long stems. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

The prices quoted are net for packets as well as larger quantities, f.o.b. Philadelphia, for delivery July to December. The above varieties—each the best in its class—provide a complete range of colors. We have many other desirable varieties of Early Flowering Spencers on which we shall be pleased to quote prices upon request.

W. Atlee Burpee Co.,

Seed Growers Philadelphia.

THE BUSINESS END OF A FLORIST'S SHOP

BY R. H. PAGE.

Bookkeeping.

Given good bookkeeping it is possible for the florist, sitting in his office, to place his hand on both the strong and the weak spots in his business. He may discover from his books how it is he earns money and why he loses so much of it. The reading of his books becomes a fascinating and profitable study, revealing the economies and extravagances, the waste and the profits, the good or the bad management.

Good bookkeeping is like a corner stone; it gives strength and stability, and, united with good buying and management (other things being equal), the business that has these must succeed.

Too Heavy Buying.

A very large proportion of buyers habitually purchase more goods than they can dispose of at regular rates (as a consequence they are unable to keep their stock fresh and inviting), the final result being lower prices, dissatisfied customers, and loss of profit.

Especially should the buying of "bargains" be carefully considered, in view of the effect on the general trade of the shop. The writer has made extensive tests in this connection in his own business and the results prove that after several cheap lots of flowers have been offered at intervals, the regular trade has been very bad, but constant inquiries were made as to forthcoming "bargains," the customers either refusing to buy the regular lines or buying reduced quantities and with expressed dissatisfaction.

In buying for a shop where the wreath trade predominates care should be taken to watch the variation in the prices of those flowers which may be used. At the moment of writing, for instance, White Carnations are half the price of White Roses, and in most cases one will serve as well as the other. It should be the aim of the buyer to secure just those flowers which will give the desired effect to his work, and the largest profit to his business. In brief, buying must be done with the head and not always according to the book, or one's personal inclination.

Shop Management.

The ideal manager for a florist's shop is one who combines artistic ability with a genius for organization. I know of one such who rarely wastes anything at all. He knows and practices thoroughly the art of economy in "making up." His designs are beauti-

ful, and many of them are made from the flowers which have been broken down in the course of the day by the carelessness of customers or assistants. One other manager I know, and he too is an artist; nothing but the choicest and most select flowers will do for his designs; he has no use for anything that is even slightly bruised. The flowers left at the end of his day's work are those which should have been used. He makes a fine profit on the flowers he sells, and loses most of it on the goods he has left over. There is no doubt as to his artistry, but his ability to manage is open to question.

A good manager will not be over anxious to have his shop very full of flowers, neither will he keep it short of them. In the one case the flowers do not look their value, and in the other the public may think they will be too dear, and not go inside to find out.

Flowers should be supplied to the workroom only in such quantities as are required for the order that is being executed. An unlimited supply generally means waste. Instructions should be given to assistants to direct the desires of the customers towards goods that are in stock; the management knows what the flowers have cost and is in the position to do business without gambling on the market price of the morrow.

Where there is a large business in cut flowers every endeavor should be made to cultivate the wreath and basket trade, as flowers that would be inevitably wasted otherwise, can then be used. This will enable the management in the majority of shops to make a far finer show of the more expensive flowers than would otherwise be the case.

I do not pretend to have exhausted any of the subjects mentioned and I would like to know the opinion of other florists on these matters.—*British Florists' Bulletin*.

LANCASTER COUNTY FLORISTS' ASSOCIATION PICNIC.

On April 10th at a full meeting of the Club it was voted almost unanimously to go to the Wild Cat for the annual picnic, but when the committee made a trip to Wild Cat to complete the arrangements, they found that in bad weather it was almost impossible to reach it on the York County side by machines and that the ferry facilities from the Lancaster County side were

inadequate for comfortable transportation. For this reason the plans were changed to Rossmere and we feel that on account of the publicity given to the original proposition that this explanation is due the participants and friends of the Club.

The Reading florists were invited as our guests and the following reached Lancaster at 9 a. m. July 17th: Mr. and Mrs. J. C. Bauder, Mr. and Mrs. John Dounag, Mr. and Mrs. Alfred Lunden, Mr. and Mrs. H. C. Huseman and Miss Huseman, Mr. and Mrs. Fred Baer, Mrs. Giles, and the following gentlemen, Harry Heck, Ferdinand Heck, Clayton Butz, Wm. Kern, A. W. Masser, W. N. Able, F. D. Lauck, and some of the younger generation. In addition to these we had with us Messrs. Dennis Connor, Mr. Bates, Mr. D. J. Koehane and Mr. S. S. Pennock of Philadelphia, Mr. T. J. Nolan of the U. S. A. and Mr. Edw. Marshall, wife and mother from Kennett Square.

The day started at 9.15 from the Reading terminal via automobile to the Kate Long Park, to the B. F. Barr Nurseries, to Mr. Geo. Wilson who owns the former home of President Buchanan with its historic associations and its historic furniture, to Maple Grove swimming pool, through the residential part of the city to the Country Club and then to Rossmere.

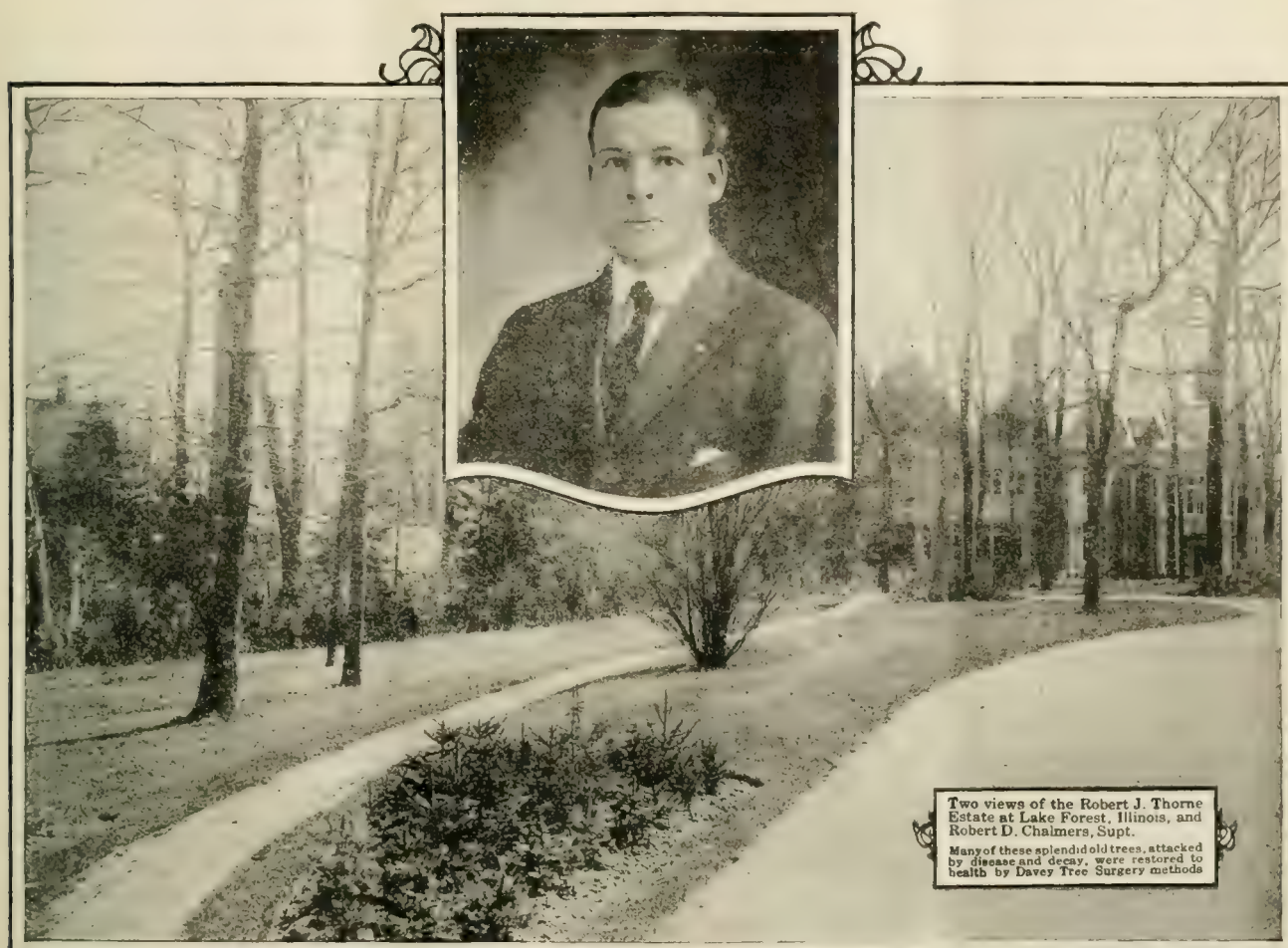
The first event at Rossmere was a picnic lunch, followed by the usual picnic amusements, with W. B. Girvan of Leola, Pa., as high man in the men's bowling contest and Mrs. A. M. Herr as high lady in the ladies' bowling. Mr. Chas. B. Herr and Miss Lizzie Musselman of Strasburg carried off the honors in the card game, and Mr. Dennis Connor was, I believe, champion in the quoit pitching contest.

At 4 p. m. the picnic was turned into a banquet, with mine host Fehl as caterer and B. F. Barr and H. K. Rohrer as table decorators. The Banquet Room is a picture of beauty in itself, with the addition of the decorations and the ladies it became a feast for aesthetic eyes and the banquet itself the realization of a gourmand's dream.

After the dinner President Elmer Weaver called on Mr. M. J. Brinton of Christiana for an address of welcome to our visitors which was given in his usual happy manner, the response was made by Mr. Harry Heck, president of the Reading Florists Club and short talks were given by Mr. Harry Huesman, and J. C. Bauder of Reading and Messrs. H. A. Schroyer and B. F. Barr of Lancaster. Mrs. Albert M. Herr, president of the Ladies Auxiliary, gave a happy little address for the ladies.

ALBERT M. HERR.

The tribute of Robert D. Chalmers to Davey Tree Surgery



Two views of the Robert J. Thorne Estate at Lake Forest, Illinois, and Robert D. Chalmers, Supt. Many of these splendid old trees, attacked by disease and decay, were restored to health by Davey Tree Surgery methods.

White Oaks, Lake Forest, Illinois.

The Davey Tree Expert Co., Inc.,
Kent, Ohio.

Gentlemen:

I have great pleasure in saying a few words in commendation of the work just completed on Mr. Robert J. Thorne's Estate. There were some very large cavities in several of the trees and the manner in which your workmen cleaned, braced and filled them reflects great credit upon themselves and the Company which employs them.

I consider money spent on trees that are in poor health and decaying *money well invested*. I heartily indorse your methods.

Yours very truly,

Robert D. Chalmers,
Superintendent.

The saving of priceless trees is a matter of first importance on every estate.

Davey Tree Surgery is a fulfillment of the maximum expectations of those who love and value trees. A careful examination of your trees will be made by appointment.

THE DAVEY TREE EXPERT CO., Inc.

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Permanent representatives available in districts surrounding Boston, Springfield, Lenox, Newport, Hartford, Stamford, Albany, Poughkeepsie, White Plains, Jamaica, Montclair, New York, Philadelphia, Harrisburg, Baltimore, Washington, Richmond, Buffalo, Toronto, Pittsburgh, Cleveland, Detroit, Chicago.



Milwaukee, Canadian address: 252 Laugauchiere West, Montreal.

Every real Davey Tree Surgeon is in the employ of The Davey Tree Expert Co., Inc., and the public is cautioned against those falsely representing themselves.

THE GARDENERS' SECTION

MORE WORDS FOR THE SHOWS.

In my first paper telling of how much value the exhibitions at Horticultural Hall had been to us in the starting of Hillcrest Farm, I asked that they be continued and encouraged through next summer, giving them as formerly every Saturday and Sunday from the middle of May into September.

Since then features of especial interest for the different months have occurred to me. In May we sent from Hillcrest Farm to Horticultural Hall a miniature wild garden on a board twenty-seven inches wide and about three feet deep. This garden received a first prize as an exhibition of wild flowers from the Massachusetts Horticultural Society and on Monday when the exhibition was over it was taken to the Children's Museum in Jamaica Plain where it remained for several weeks. The interest taken in this garden was shown by the following letter from the director of the Museum, Miss Delia I. Griffin, who wrote: "I can hardly tell you how much delighted I was on reaching the Museum, Saturday, to find this charming nature garden from Hillcrest Farm. I have never seen anything more perfect in its construction, and I hope you will not only accept my thanks but will convey them, with my great appreciation to the gardener who did this work.

"The garden has attracted a great deal of attention and the visitors have been much interested in noting the varieties of violets and other flowers. The ladies' slippers look fresh as if they were still in the woods. We are taking every care of the garden and hope to preserve its beauty for some time."

If this small garden was enjoyed last spring, why could not one on a much larger scale be shown in Horticultural Hall next May? People are becoming more and more interested in rock gardens and alpine flowers. In Horticultural Hall we could show how best to lay the stones for such a garden, and the use of pine needles and of spagnum moss in protecting the tender roots of these dainty little plants. It would also be a good opportunity to show the wonderful beauty

of the native springtide flora of New England. One enthusiastic commiserator on our miniature garden was that it showed what anyone could do with stones, seedling pines and wild flowers when properly combined.

This rock garden for May is only a suggestion. In June we want to show roses. Not only to show them, but to help people to grow them. The first roses to bloom after the Hugonis has dropped its yellow petals are the Scotch and Austrian briers. These need especial care and attention, for they are rampant growers. So I would suggest that on the first Saturday in June besides having a special exhibition of brier roses, that a talk be given in the upper hall on the best way to grow them. Next come the beautiful hybrid teas; everyone with a garden wishes to know how to plant and to prune them. So why not have a display of them the second Saturday in June with instructions about them? Next to the hybrid teas come the hybrid perpetuals with their beautiful great blooms, and these are followed by the ramblers. This especial attention given to roses through June need in no way prevent the iris, peonies and other flowers from being shown.

In July the tall flowers like larkspur, campanulas and thalictrum bloom in our gardens. If given plenty of fertilizer these plants may need no help in holding up their heads. But how often our gardens lose in beauty by having these tall flowers scraggle over their beds or else they are awkwardly tied! In Horticultural Hall samples of good support and tying could be shown.

With August come the peaches. Much attention is now being given to the best packing of apples—why can we not next August in the small hall show how the more tender peaches can be harvested and packed?

Grapes come with September. Would it not be well to bring a few vines into the hall and show the best way of tying them to wires and to trellises? Besides displaying varieties of grape juice and of jellies.

With October comes the apple, to which so much attention is now being paid that it is a story in itself. This little paper is just to start a few suggestions which others more experienced may follow with their ideas as

to how Horticultural Hall can be used in an enjoyable and instructive way from May through September without in any way interfering with the four large exhibitions which the trustees have planned.

M. R. CASE.

Hillcrest Farm, July 17, 1919.

THE ARALIA FAMILY.

The Aralia family furnishes the Arnold Arboretum with three handsome trees which flower in late summer and early autumn. They are *Acanthopanax ricinifolium*, *Aralia spinosa* and *A. chinensis* and its varieties. The *Acanthopanax* is a tree which is common in the forests of northern Japan, Korea and China where it is often seventy or eighty feet high with a massive trunk and great wide-spreading branches armed, like the stems of young trees, with many stout prickles. The leaves hang down on long stalks and are nearly circular, five or seven-lobed and often fifteen or sixteen inches in diameter. The small white flowers are produced in compact, long-stalked clusters which form a flat compound, terminal panicle from twelve to eighteen inches across and are followed late in the autumn by shining black fruits which do not fall until after the beginning of winter. This tree is perfectly hardy in the Arboretum where it has been growing for twenty-four years and where it has flowered and ripened its seeds now for several seasons. It is one of the most interesting trees in the collection and, because it is so unlike other trees of the northern hemisphere, it is often said to resemble a tree of the tropics.

Aralia spinosa, the so-called Hercules' Club of the southern states where it is a common inhabitant of the borders of woods and the banks of streams, is a tree often thirty feet high with a tall trunk and wide-spreading branches covered with stout orange-colored prickles. The leaves, which are borne at the ends of the branches, are long-stalked, twice pinnate, and from three to four feet long and two and one-half feet wide. The small white flowers are arranged in compound clusters which rise singly or two or three together above the leaves and are three to four feet long. The fruit is black, rather less than a quarter of an inch in diameter, and ripens in early autumn. It is now well established on the slope at the northern

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base of Hemlock Hill in the rear of the Laurel plantation and is now spreading rapidly there over a considerable area by shoots from underground stems.

The Asiatic tree *Aralia* resembles in habit and general appearance the American *Hercules' Club*, but is dis-

JULY ROSES.

July is the month when the hybrid Rambler Roses bloom, especially those which have been largely influenced by the Japanese *Rosa Wichuraiana*, but in the Arboretum collection there are only four species which do not begin to flower until after the first of July. These in the order of the opening of their flowers this year are *R. stellata*, *R. Jackii*, *R. setigera* and *R. Wichuraiana*. *R. stellata*, which is a native of the mountains of southern New Mexico, is a comparatively new inhabitant of gardens, and one of the most interesting and distinct of American Roses. It is a shrub with slender, pale yellow stems armed with long slender spines of the same color, small leaves with thick, round, lustrous leaflets, which generally resemble leaves of some western Gooseberry, and deep rose-colored, slightly cup-shaped flowers from two inches and a half to three inches in diameter. The fruit is dark red, nearly globose, covered with prickles, half an inch in diameter, and surmounted by the much enlarged calyxlobes. *Rosa Jackii*, which is a native of Korea, and one of the *Multiflorae* Group, has long stems which lie nearly flat on the ground, lustrous leaves and pure white clustered flowers rather more than two inches in diameter. The flowers are larger than those of the Japanese *R. multiflora*, and open two or three weeks later. The *Prairie Rose*, *R. setigera*, is well known to the inhabitants of the middle states for it is a common prairie inhabitant from Michigan to Texas. It produces long slender stems which can be trained

over an arbor or against a building, but this *Rose* looks best when allowed to grow naturally when it forms a wide bush of gracefully arching stems. The flowers are produced in wide, many-flowered clusters and are light rose pink. This is usually the last *Rose* to open its flowers in the Arboretum, but this year *Rosa Wichuraiana* is several days late. Its long prostrate stems are well suited to clothe banks which when the flowers open look as if they had been covered with snow. Grown in this natural way it is perfectly hardy, but when the stems are trained over an arbor or trellis they often suffer in New England from cold; and its hybrids, among which are found some of the most beautiful Rambler Roses, are less hardy here than those in which *Rosa multiflora* has been one of the parents.—*Arnold Arboretum Bulletin*.

THE WESTCHESTER AND FAIRFIELD HORTICULTURAL SOCIETY.

The regular monthly meeting of this society was held in Hubbard's Hall, Greenwich, Conn., Friday evening, July 11. Pres W. Graham in the chair. W. J. Seeley reported that he had made all arrangements for the outing, dinner and games, which will be held at Rye Beach, Tuesday, August 12. The Tarrytown Horticultural Society will join in with us.

George Baldwin, who recently returned from a business trip in Europe gave a very interesting account of Horticultural doings over there. Mr. Baldwin was very fortunate in securing a large collection of hybrid orchids, before the Quarantine Act. No. 37, became a law. In referring to the Quarantine Act, Mr. Baldwin claims that the English, French and Belgian growers will suffer by its enforcement. Joe Stobo who served with the American Army in France, gave a vivid descrip-

tion of what he saw and the hardships he came through. P. W. Popp announced that he was going to attend the convention of the National Association of Gardeners at Cleveland on August 26 and called for suggestions that he might bring before that body. Mr. Popp gave a very interesting address on the good work that the association was doing.

James Linane took first prize in the vegetable section and J. Andrews first with a fine vase of double hollyhocks.

JACK CONROY, Cor. Secy.

W. ATLEE BURPEE COMPANY THINKS WELL OF THRIFT.

The letter which is appended below has recently been distributed by W. Atlee Burpee Company of Philadelphia to all of its employees.

It is such a model of its kind that "Thrift Spirit" reproduces it in full with the thought that other firms might introduce War Savings Societies into their organizations in much the same manner. The letter follows:

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A LETTER FROM CALIFORNIA.

Redlands, Calif., July 14, 1919.

Mr. Editor:—Speaking of Quarantine No. 37, something much discussed among plantsmen, and all those whose concerns have to do with horticulture more especially, is it really thought that an order or regulation of this sort will banish forever, or even lessen the evil of any parasites on vegetation? Where I live here on the Pacific slope there are to be found in more or less abundance, accordingly as we are industrious or lazy, every sort of plant bug and fungi parasitic on vegetation, which can endure the cycles of change in the climate.

It must be the same in New England and everywhere else on earth. An organism exists where it must. It is not necessary at all that any organism should be a native; only that the environment be suitable within certain limits. The question of importance is whether it is the normal condition of vegetation to support communities of parasites. I will decide for myself that it is not the normal condition, admitting freely at the same time however that it is the common condition. To say that and to go no farther would not help matters at all, and it is necessary to cast about a little and see what is the great difference between a normal and the common condition in the case.

First of all, but only in the broadest sense, one may feel very confident that no plant parasite is a cause of disease in plants, but that certainly parasitism is responsible for a spreading and aggravating influence. Witness the annoyance of cooties. In normal times and in a normal environment the cootie, who is always with us, plays the part of an interested and expectant bystander and leads a life which is precarious to the point of

being able to maintain a mere representation of his species only, not so much because we fight him, but rather because he is not provided with a meal ticket for one thing, and that too because his preferred provender is not about.

Gardeners nearly always cultivate exotic plants, and generally types of those even that are less vigorous than their primal forms. In such a case the gardener must select a suitable environment or create it. It is necessary in the majority of cases to create the environment. In the average plant its output of energy to that required is an exquisite balance; if the energy is less or more than the requirement there is at once a condition of disease. Common manifestations of disease due to abnormal root pressure are those excessive exudations upon the leaves, such as those of roses, which invite an attack of mildew; a condition opposite to this to be observed in the same family of plants is that of yellowing, which is a premature ripening, but from the fact that it is premature is destructive. The excessive exudation due to the above required pressure is often mistaken for dew, and appears as a spangling of



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drops of water at the edges of leaves. Its message is that the atmospheric temperature is not steady, and that it is generally too low, while the earth temperature is at least high enough. The condition is quite different from that responsible for dew, which is simple condensation.

At the other end there is the condition of yellowing, a condition of chlorosis, a premature ripening because of a lack of root work, due often enough to a scanty water supply, but in gardening oftener to bad soil conditions of a temporary character. The parasites standing by in this case are red spider and thrips.

If plants had a nervous system as delicate as our own so that they could speak or make gestures their cultivation would be simple indeed, and because not we resort to many unworkmanlike makeshifts, quarantines and pest fighting being easy, at least, among these. In line with other forms of industry, however, horticulture must have a more practical outlook; it must be better understood; much of the old guessing way of doing things must give place to accurate knowledge, and if our schools are not adequate, or do not progress, we

should feel it necessary to throw much of the old mustiness which clogs out of them. There must be teachers which can do something more than pass along those things discovered so long ago.

If one searches the shelves of a good library for work lately accomplished in pathology or entomology in connection with vegetation, he will find that it is revamped material not less than fifty years old, but often skillfully modernized. Does anyone think a few abnormally capable investigators who worked in the middle of the last century, and before, exhausted all the possibilities in this field? Contrast this condition with that in other branches of physics. The plain worker in horticultural pursuits is not behind the times; he has constantly improved his routine, his facilities, and consequently his product. But his progress was slow, and he many times has had to feel in the dark, and he has looked in vain for those brilliant discoveries which in other industries have been the means of advancement at a bound.

The policy of our governmental department is not blameless for this condition. Its appropriations have not been

miserly at all in many years. Results have been quite disappointing, and the work often has consisted of a crude attempt to systematize some generalities, rather than a straight attack upon vital subjects. A typical government bulletin will tell you several beautiful ways to kill earth worms, to snuff the life out of ticks, and to smother ants; but now, after telling us these elementary things in elementary fashion so many years, there is still no word or hint why any of these things are found so abundantly where we do not want them. Similarly, for more than twenty years the well-worked out scheme of heredity glimpsed by Mendel has been available, but we are still waiting as practical men to be told how the good qualities of a peach or apple may be transmitted by its seed, anxious because knowing so well that any plant on its own roots is worth a thousand that have been grafted on another's.

Possibly, as the happenings in the world in the past few years appear to have quickened mentality very generally, some results may flow in our direction and to our benefit.

Yours truly,

SIDNEY HOCKRIDGE.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

Perhaps there is no time of year in which the conifers are more attractive than just now. It is a great pleasure to visit a good collection and revel in the wondrous beauty of the conifers, as their brilliant color shades from light to dark in the various species. After a walk through the Arnold Arboretum the other day I decided that no handsomer plant was to be found there than a specimen of *Pseudolarix* near the Walnut street entrance. The Chinese golden larch has a free open habit, and graceful feathery foliage that gives it a most distinct and pleasing appearance. It is perfectly hardy in Boston and probably in parts of New England further north. As a subject for lawn and park planting it cannot be surpassed. In the fall the pea green leaves take on clear yellow tints, for this is a deciduous tree and drops its leaves like the true larches.

The largest tree of the kind in New England is to be found on the Hunnewell estate at Wellesley, Mass. This

tree has ripened seeds for many years and the plants in the Arnold Arboretum were raised from these seeds. This Chinese tree certainly deserves very much wider recognition than it has yet been given. For one thing it seems immune to the attacks of insect pests. At least the particular kind of pest, if there is any, which preys upon it has not yet turned up.

One lesson which has been emphasized by conditions in the pinetum is the fact that larches and spruces must not be planted in close proximity. The spruce is a natural host for the insect which is making the larches look as though they had been scorched by a forest fire. This is a very serious matter, and probably will result in the making of a new planting of larches in a different part of the Arboretum grounds.

Another oriental introduction which must share honors with the *pseudolarix* is the Japanese yew, *Taxus cuspidata*. Professor Sargent has been

reported as saying that this is the finest plant which Japan has contributed to the gardens of New England. Very likely some such statement was made, for Professor Sargent greatly admires this yew. There are several excellent specimens in eastern gardens, some of the finest perhaps being found on the Bayard Thayer estate at Lancaster, Mass. The specimen illustrated was made on the Thayer place, and is about thirteen feet high and twelve feet through. It was moved to its present location by Superintendent William Anderson about eight years ago. The Japanese yew was introduced into this country many years ago by the Parsons Nursery at Flushing, L. I. Two forms are found in frequent cultivation. One spreads from the bottom while the other spreads at the top, often producing a very interesting and vase-like effect. This yew is adapted to many purposes. Its habit of growth is such that it can be used safely in a formal garden; yet it makes an excellent hedge and doesn't look out of place on grounds of limited size. It is commonly raised from buddings as when seeds are sown the resulting plants usually show a distinct leader and are likely to grow into small trees.



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ARNOLD ARBORETUM NOTES

Oxydendrum arboreum, the Sour Wood or Sorrel-tree, so-called from the acid taste of the leaves, is the only American tree in the Arboretum which flowers in August. It is a native of the Appalachian forests from southwestern Pennsylvania and is most common on mountain slopes, but reaches the coast of Virginia and North Carolina. The Sorrel-tree, which is perfectly hardy in New England, is a beautiful tree with bright green shining leaves which turn bright scarlet in the autumn, white Andromeda-like flowers erect on the branches of spreading or slightly drooping terminal clusters, and pale capsular fruits which in the autumn are conspicuous among the brilliant leaves. There is a group of these trees among the Laurels at the base of Hemlock Hill.

Many shrubs with conspicuous flowers bloom in the Arboretum during the summer months. The list includes the Heathers (*Calluna vulgaris*), and several species of *Genista* and *Cytisus*. Of this European group the handsomest which can be grown here is the bright yellow-flowered *Cytisus nigricans*, the yellow-flowered *C. capitatus*, the white-flowered *C. leucanthus* and the yellow-flowered Woad Wax and its varieties (*Genista tinctoria*), too well known in Essex County, Massachusetts, where escaped from cultivation it has ruined many hundred acres of hillside pastures. The *Lespedezas* with their abundant purple, pea-shaped flowers, and the handsomest of the Chinese *Buddleias* are still to bloom, as is the very hardy *Acanthopanax sessiliflorum*, a vigorous shrub of eastern Siberia, most conspicuous in winter when the compact round clusters of the shining black fruits are on the ends of the branches. The Japanese *Hydrangea paniculata* and its varieties, and the *Hydrangeas* of North America produce here the showiest July and August flowers.

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The early-flowered forms of Hydrangea paniculata (var. praecox) which is the handsomest of the group, is already in flower; and all the American species are blooming or just opening their flower-buds. The most popular of these American plants is the form of H. arborescens (var. grandiflora) with snow-ball-like heads of white sterile flowers. There is a similar abnormal form of another of the American species, H. cinerea. More beautiful, and one of the handsomest of the genus, H. quercifolia will flower this month in the Shrub Collection. This is an unusual event for this shrub, which is a native of the southern states, is frequently killed to the ground here. In the middle and southern states it is an important and valued garden ornament. Of the American Hydrangeas which are perfectly hardy in the north the handsomest is H. radiata, a native of mountain slopes in North and South Carolina, once a popular garden plant but now rarely cultivated. It is a broad, round-topped shrub with leaves of ample size, dark green above and silvery white below, and broad flat heads of flowers surrounded by a ring of white neutral flowers.

Amorpha canescens, the Lead Plant, is beginning to open its small violet-colored flowers arranged in long, narrow clustered spikes, which are conspicuous by the contrast with the color of the leaves and branches and are thickly covered white gray down. This plant is a native of the Mississippi valley where it grows on low prairies from Indiana and Minnesota to Texas.

Aesculus parviflora occupies an important place among summer flowering shrubs. This native of the south-eastern states is hardy in the north,

and with abundant space and in good soil will spread into great thickets with stems seven or eight feet high. Toward the end of July it will be covered with its tall, narrow, erect spikes of small white flowers which stand up well above the foliage.

Cornus paucinervis suffered somewhat in the cold winter of 1917-18, as was to have been expected, as it grows naturally at low levels in central China where the Orange flourishes and rarely ascends to altitudes of three thousand feet. It has recovered, however, and is now in flower. If it were a little hardier it would be one of the best summer flowering shrubs introduced by Wilson from China. It is a shrub five or six feet tall with erect stems, small, narrow, pointed leaves with only two or three pairs of prominent veins, small clusters of white flowers and black fruits.

THE PAGODA TREE.

Sophora japonica, sometimes called the Pagoda-tree, is in spite of its name a Chinese tree which has been cultivated in Japan for more than a thousand years, and as it first reached Europe from that country was long considered a native of Japan. It is a round-headed tree which in Peking, where it has been much planted, has grown to a large size and looks from a distance like an oak-tree. The leaves and branchlets are dark green, and the small, creamy white, pea-shaped flowers, which open here in August, are produced in great numbers in narrow, erect, terminal clusters. There are also in the collection the form with long pendent branches (var. pandula) which rarely flowers, and a young plant of the form with erect branches (var. pyramidalis).

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TIMELY GREENHOUSE NOTES.

The border of hardy perennials looks its brightest at this season. Weeding, staking, tying, labeling and watering should be attended to at this time. The seeds of most varieties germinate readily and can be grown into sturdy little plants. A frame or a nicely prepared seed bed may be used for this work, or the seeds may be started in trays or boxes. All transplant easily when still small. An early pricking off is advisable and soon after that a planting into cold frames or the open borders with sufficient time for re-establishment before winter sets in. This is one of the ways whereby good stock may be had for next year's sales where garden space is limited.

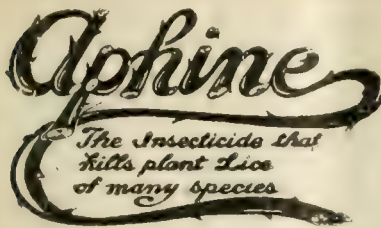
Carnations in the field should be cultivated once every week, even should there be no rain. After every rain cultivate just as soon as the soil may be worked, but be careful not to work the soil while it is wet. The idea is to form a dust mulch on top to conserve the moisture below. Stems which have begun to run up should be pinched back. In that way by benching time you will have plants with shoots in every stage of growth, and that means a steady crop of blooms next winter. Go over the plants often so that you will be able to top each shoot at the time it is ready. In this way the plants will not be allowed to make unnecessary growth.

Rambler roses must have an abundance of water and daily heavy syringing. Our hottest weather often comes at the end of July, and if the tender and unripened shoots of these roses suffer for water, mildew will set in,

weakening the growth and the strength of the eyes which will now be forming. Ramblers need watchful care just now, that is, those which are grown in pots under glass during summer. Then there will be canes and eyes which will give a truss of blooms at every eye. The moisture will be retained much better if the pots are plunged into a bench where there is some soil. The desired amount of growth will be made by the end of August, and the plants may be stood outdoors to ripen up their wood. They should be given plenty of room so the sun will reach through them. Give a good syringing early in the morning and right after dinner.

The seed of stocks should be sown now for next winter's blooming. Good varieties are Beauty of Nice, a fresh pink, Mont Blanc, a splendid white, Queen Alexandra, a delicate lilac, Empress Elizabeth, a deep rose. Do not forget the old standby "cut and come again" for a white. Pot the seedlings up singly as soon as they are large enough to handle, and let them come along in a cool house. It may be necessary to put them into 3½ inch pots before they can be planted on the benches after the early chrysanthemums come out. Where you want to have a large amount of double flowers it is best to wait until they show flower buds. The blunt buds always come double.

Antirrhinums which were propagated early and are now in four-inch pots should be planted out in a bench now. A rich soil such as would grow good carnations should be used, and they should be set twelve inches apart each way.



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ard insecticide will prevent ravages on
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Florists have used it with wonderful
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water 30 to 50 parts.

1/2 Pint, 80c.; Pint, 50c.; Quart, 90c.;
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lon Can, \$10.00; 10 Gallon Can, \$20.00.
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AMERICAN ASH TREES.

The most valuable of the American
Ashes as a timber tree and one of the
handsomest of the whole genus, the
so-called White Ash, *Fraxinus ameri-*
cana, grows naturally from Nova Sco-
tia to Florida and eastern Texas, and
westward to Nebraska and Oklahoma.
It is a splendid tree often, when con-
ditions of soil and rainfall favor it
more than one hundred feet high with
a tall massive trunk five or six feet in
diameter. If anyone in northeastern
North America wants an Ash-tree for
shade or to produce timber, *Fraxinus*
americana is the tree to plant. It
grows, too, better in western Europe
than most eastern American trees, al-
though it will probably not become as
good a tree there as the native Ash.
A variety of *Fraxinus americana* (var.
subcordata) differs from the common
form in its thicker, entire or only
slightly toothed leaflets which are sil-
very white on their lower surface.
This tree was raised at the Arboretum
in 1874 from seeds collected at Mt
Victory in central Ohio. It is there-
fore now one of the oldest trees raised
here. This Ohio tree has grown more
rapidly and is handsomer than any
other Ash-tree which has been planted
in the Arboretum. Seeds of this tree
usually reproduce the variety, and it is
this variety which should be planted
when the best possible Ash-tree is
wanted in this part of the country.

The Black Ash, *Fraxinus nigra*, grows
as far north as Newfoundland and the
shores of Lake Winnipeg, that is,

further north than the other American Ash-trees, and is a common New England tree. It grows naturally in deep cold swamps and on the low banks of lakes and streams, and long resisted every effort made to establish it in the Arboretum until Mr. Dawson tried the experiment of grafting it on roots of the White Ash. These grafted plants although still small are growing well in peat soil on the left-hand side of the Meadow Road near the Rhamnus Collection.

Fraxinus pennsylvanica, the so-called Red Ash, is another tree widely distributed over the eastern part of the continent from New Brunswick and southern Dakota southward. It is a smaller tree than the White Ash, rarely growing more than fifty or sixty feet tall, with a trunk less than two feet in diameter a narrow head of thin foliage, and branchlets covered with pubescence. The inner surface of the bark of this tree is sometimes red when first cut; the wood is about as valuable as that of the White Ash, but for shade or ornament *Fraxinus pennsylvanica* is not worth planting.

The Green Ash is now usually considered a variety of *Fraxinus pennsylvanica* (var. *lanceolata*), and is most abundant in the valley of the Mississippi river and westward. It is easily distinguished by the bright green color of the two surfaces of the usually narrow leaflets. Seeds of the Green Ash germinate easily and quantities of seedling plants are found on the sandbars and banks of many western rivers. It is a popular tree, therefore, in western nurseries, and, although not suited for the purpose, has been largely planted in the west as a street and shade tree, and occasionally also in the east for American nurseries have often substituted it for the White Ash. Another Ash of the Mississippi Valley, the Blue Ash of popular tree books, *Fraxinus quadrangulata*, owes its scientific name to its four-angled branchlets. This is one of the noble trees of the American forest, almost rivalling the White Ash in size. This tree grows naturally in limestone soil, but it has grown well in the Arboretum where it is helped by occasional applications of lime.

Two southern trees related to the White Ash, *Fraxinus biltmoreana*, with densely pubescent branchlets, of the southern Appalachian region and westward, and *F. texensis* with rounded leaflets and a native of central and western Texas, are established in the Arboretum. Three species of the southeastern states and the five species of New Mexico and Arizona will probably never live very long in Massachu-

setts, although the curious little *Fraxinus anomala* with square branchlets and leaves usually reduced to a single leaflet at one time flourished in the Arboretum during several years.

HOTELS WILL BE CROWDED.

Reservations for Detroit Convention Should Be Made Early.

The S. A. F. Convention Headquarters will be at Hotel Statler on Grand Circus Park, ten minutes by the Woodward Avenue car line from the Convention Auditorium (Arcadia), 615 Woodward Ave.

It is highly important that everyone intending to come to the Convention, August 19-20-21, make reservations at the hotel here as soon as possible as there are to be two other big conventions held here the same week. The Hotel Committee of the local florists will aid all who will make known their prospective requirements and address the same to the chairman, E. A. Fetters, 17 East Adams Ave., Detroit.

A list of the principal hotels and their rates and distance from headquarters (Hotel Statler) follows:

Hotel Statler.

Room with shower bath only, for 1 person, \$2.50 per day.

Room with shower bath only, for 2 persons—double bed—\$3.50 per day.

Room with tub and shower bath for 1 person, \$3.00 to \$5.00 per day.

Room with tub and shower bath for 2 persons—double bed—\$4.50 to \$7.50.

Room with tub and shower bath for 2 persons—two beds—\$5.50 to \$7.50.

Room with tub and shower bath for 4 persons—three beds—\$8.00.

Hotel Tuller, Grand Circus Park, adjacent to Headquarters.

Double rooms only—inside—\$4.00 and up per day.

Double rooms only—outside—\$5.00 per day.

Hotel Pontchartrain, Woodward Ave., 5 blocks from Headquarters.

Rooms with single beds and running water, \$3.00 and up per day.

Rooms with double beds and running water, \$4.00 and up per day.

Rooms with bath, \$6.00 and up per day.

Hotel Charlevoix, near Grand Circus Park 1 block from Headquarters.

Rooms with single beds and bath, \$2.00 per day.

Rooms with single beds, without bath, \$1.50 per day.

Rooms with double beds and bath, \$4.00 per day.

Hotel Cadillac, Michigan Ave., 4 blocks from Headquarters.

Rooms with twin beds and bath, \$5.50, \$6.00, \$7.00 and \$8.00 per day.

Rooms with double beds and bath, \$5.00 per day.

Rooms with twin beds without bath, \$2.00.

Rooms with double beds without bath, \$3.50.

Hotel Griswold, Grand River Ave., 2 blocks from Headquarters.

Rooms with single beds, without bath, \$1.50 per day.

Rooms with single beds and bath, \$2.00, \$2.50 and \$3.00 per day.

Rooms with double beds and bath, \$3.00, \$4.00 and \$5.00 per day.

Rooms with double beds without bath, \$2.50.

Hotel Plaza, John R. Street and Madison Ave., 4 blocks from Headquarters.

Rooms with single beds, \$2.50 and up per day.

Rooms with double beds, \$3.00 and up per day.

Hotel Madison, Madison Ave. and Randolph St., 5 blocks from Headquarters.

Rooms with single beds and bath, \$1.50 and up per day.

Rooms with double beds and bath, \$2.50 and up per day.

Hotel Fort Shelby, Lafayette and First St., 7 blocks from Headquarters.

Rooms with single beds and bath, \$1.50 and up per day.

Rooms with double beds and bath, \$2.50 and up per day.

Parlor bed room and bath, \$4.00 per day.

Hotel Ste. Claire, Monroe and Randolph St., 6 blocks from Headquarters.

Rooms with bath, \$1.25 to \$2.50 per day.

There are, of course, many smaller hotels at which accommodations may be had but the list above include the best and largest.

ROCHESTER.

Business has been on the quiet side the past week. Carnations are small and none too plentiful; roses are fairly plentiful. Sweet peas are arriving in small quantities. The market is overstocked with garden flowers; gaillardia, coreopsis, hollyhocks, cornflower, snapdragon and sweet William.

Geo. T. Boucher had the decorations for the Opticians' Convention at Convention Hall.

The employees of the Rochester Floral Co. were entertained at a sausage roast at the home of Mrs. Bashford of Sea Breeze, N. Y., on Wednesday of this week.



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BOSTON FLORISTS' PICNIC.

The first annual picnic of the Boston Florists' Association was a great success. It was held Thursday, July 17, at Lynnfield, Mass., and was attended by about 100 people, including the ladies. The trip from Boston was made in 25 automobiles, the party leaving Hoffman's on Massachusetts avenue about noon. On arriving at the park, the picnickers sat down to a most excellent dinner at Wardhurst Club. The menu was as follows:

Blue Points Olives Dinner Biscuits
Vegetable Salad
Steamed Clams Clam Broth
Soup
Half Broiled Chicken
Whole Broiled Lobster

French Fried Potatoes Peas
Ice Cream Cake Coffee

Everything was good, but those biscuits! Well, Well! Just ask Messrs. Hastings, Hanna and Carthright. If the number which they ate should be reported, it wouldn't be believed. Some say Mr. Hastings led by half a biscuit, but this he denies indignantly.

During the repast there was dancing to the music of a Jazz band. Afterwards there were sports, including a baseball match. There seemed to be

KENTIAS

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WIRE WORK

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nobody in particular to keep the score, but it was generally admitted that the wholesalers won, and the retailers were good losers. Henry Penn won the fat man's race, Sam Truckman the potato race. Henry Penn was chairman of the committee in charge of the picnic. Sydney Hoffman looked after the sports. Henry Quint was in charge of the automobiles, George Arnold saw to the dinner and William Stickel looked after the finances.

Everybody seemed to feel that an excellent choice for the place to hold the picnic had been made. The grounds around the Club house are extremely pretty and the situation on the lake is ideal.

NEW YORK.

Business is very dull even for July. There is an ample supply of Roses, the best of which is Key. Beauties are not so plentiful as they were but the demand is light. The quality of Russell and Euler is fair. Ophelia is as good as the weather conditions permit. For the past week red roses, the supply of which is light, have been in demand for special occasions. Carnations are diminishing in quality and quantity. The market is generously supplied with Gypsophylla and other seasonable field grown stock. Gladiolus are more plentiful. Longiflorum lilies are moving slowly though there is no great number coming into the market. Orchids are not going fast.

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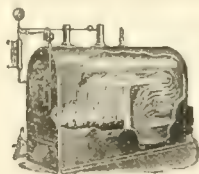
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After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

**Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO**

Principles and Practice of Pruning

By M. G. KAINS

Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

After a few pages of introduction the author discusses Plant Physiology as related to pruning. A chapter takes up the Philosophy of Pruning, itself a very interesting subject. Then follows a classification and clear discussion of Buds, very fully illustrated from life. How Wounds Heal is an exceedingly interesting chapter, as are also those on Prevention and Repair of Mechanical Injuries, Pruning Nursery Stock, Young Trees, Mature Trees and Odd Methods of Pruning and Training, Rejuvenating Neglected Trees and Practical Tree Surgery.

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Plant Propagation, Greenhouse and Nursery Practice

By M. G. KAINS

We have had many inquiries from time to time for a reliable and up-to-date book on plant propagation, but were always at a loss to find any publication that we could recommend. The subject has been dealt with in fragmentary manner only in books that have come to our notice. So it is well that this new work has been issued, especially as it is both comprehensive and practical, and it should meet with a ready sale among plantsmen, nurserymen and gardeners. There are nineteen chapters covering in detail topics of germination and longevity of seeds, propagating by buds, layering, cuttings, grafting, etc., fruit tree stocks, scions, etc., and there are eight pages of condensed cultural instructions in tabulated form, covering annuals and perennials from seed, woody plants, evergreens, vines, bulbs and tubers, greenhouse and house plants, ferns, palms, water plants, orchids and cacti. The illustrations are numerous, comprising 213 figures and halftone plates. There are 322 pages well bound and on heavy paper, teeming with helpful information. It is a book which no cultivator can afford to do without. It is worth many times its price. Copies can be supplied from the office of HORTICULTURE at publisher's price, \$1.50.

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HORTICULTURE

Vol. XXX

AUGUST 2, 1919

No. 5

ROSES

OWN ROOT, 3-INCH, \$15.00 PER 100
\$140.00 PER 1,000

- 2000 CECILE BRUNNER
- 1200 HADLEY
- 1000 COLETTE MARTINET
- 4000 WHITE KILLARNEY
- 2000 DBL. WHITE KILLARNEY
- 2200 KILLARNEY BRILLIANT
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GLADIOLI, \$4.00, \$6.00,
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Dwarf Boston, 3½-inch pots.....	.25 each
Elegantissima, Elegantissima compacta, Superbissima Dwarf Boston, and Scottii, 6-inch pots.....	.75 each
Muscosa and Smithii, 5-inch pots.....	.75 each
Smithii, 6-inch pots.....	1.00 each
Elegantissima compacta, 8-inch pots.....	2.00 each
Elegantissima, and Elegantissima compacta, 10-inch pots..	4.00 each
Harrisii, 8-inch pots.....	2.00 each
Dwarf Boston, 8-inch pots.....	1.50 each

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FOR JULY AND AUGUST FLOWERING

Mme. E. Moullere and Otaksa. Extra large specimens, grown in half-barrels; 4 to 4½-ft. spread, well budded, just beginning to show color. \$15.00 to \$25.00 each—according to size.

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Boston and Scottii, 5-inch pot grown at **\$4.80 per dozen, \$35.00 per 100**, shipped without pots.
Table Ferns, assorted 3-inch, **\$6.00 per 100.**

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LOSING INSURANCE MONEY BY DEPENDING TOO MUCH ON THE AGENT.

A veteran insurance man, who is good enough to commend some of these articles for business people, said to me the other day: "You couldn't do better than write something about the danger of depending too much on an insurance agent. The authority of all insurance agents is sharply limited. Some agents, for instance general agents, can do more than a mere soliciting agent, and bind the company, but the authority of every agent is limited somewhere, and if they make some promise or some agreement which goes beyond the limit, it is void and the company is not bound. The man who has relied on such a promise or agreement may lose all his insurance."

As a matter of fact, while he was speaking some illustrations occurred to me which had occurred under my own observation.

My experience is that the average business man relies almost entirely upon his insurance broker or agent to keep him covered and safe. This is a very risky business, and thousands of dollars have been lost through it. If the agent is not a general agent of the company he cannot bind the company, and even if he is a general agent, he cannot always bind the company. With insurance the only safe thing to do is to depend on nobody, but to keep after a given situation until you know that the company has knowledge of it and has passed upon it.

For instance, in one case which I know of, a man carried fire insurance on his store and its contents. A fire occurred at a busy season. He went to his local insurance agent, through whom he had placed the risk, and said: "See here, this thing is upsetting my business at the biggest season of the year. Can't you fix it up so that I can go ahead and repair?" The agent, accommodating like most local agents, went around, sized up the building, and said: "Go ahead and make a contract with the builder; it'll be all right." The owner therefore went ahead and placed his contract for repairs and reconstruction, spending considerable more money than he would have spent had he expected it would come from his own pocket.

Later when he sent the bills to the company it repudiated them and refused to pay on the ground that he had filed no proofs of loss, as required by the policy, and that the agreement made by the agent was not binding on the company. Furthermore, the company said it intended to contest

the claim on the ground that the merchant had persistently kept more gasoline on the premises than he had any right to do under the policy, and there was reason to believe that the gasoline was at least partly responsible for the fire.

The court ruled that the company's position was sound; that the agent had no right to bind the company with such a promise as he made, and that the company had a valid defense to the claim under the gasoline clause.

The merchant of course lost his insurance through double carelessness—first, by keeping too much gasoline without the company's consent, and second, for taking the agent's word for something that did not bind the company.

I remember another case involving the right of an insurance agent to absolve the holder of a policy from filing proofs of loss. In this case there was a fire and the local agent, who had placed the risk went around and satisfied himself that the fire had occurred, also as to what the loss was. The insured thought—and the agent told him so, too—that it would be superfluous to file proofs of loss, since the company had had notice and its representative had actually been there. So he filed none within the time. The company later refused to pay on that ground and pointed to a clause in its policy that "no officer or representative of this company shall under any circumstances have power to waive any provision of this policy, and any attempt so to do shall be null and void, and not binding on this company." Here, too, the company won.

In a third case a local manufacturer had gotten his fire insurance through a local agent. The policy expired and the manufacturer thought the renewal rate too high. He protested and dickered, the building being meanwhile uncovered. Finally he went to the agent's office and agreed to pay the asked rate. The agent said: "All right, I'll put it through right away and send you a bill for the premium in the usual way." The agent was suddenly called out of town that day and did not put it through. Before he got back a fire almost gutted the manufacturer's plant. He thought himself safe until he came to look into it. The company refused to pay on the ground that there was no insurance on the plant at time it burned. The manufacturer claimed that the arrangement between himself and the agent constituted a contract of insurance, and the only reason he did not pay his premium then was that for years the agent had renewed his policies and

sent him a bill for premiums afterward. The court said that the company didn't make this arrangement and didn't agree to it, therefore it wasn't bound. The cold fact was that it had no policy on the plant at the time it burned and had not been paid for any.

The loss here was so heavy that it crippled the manufacturer for years. He could have easily prevented it.

There is a great difference between the authority of a general agent of an insurance company and that of an ordinary soliciting or local agent. General agents are authorized to accept risks and issue policies by filling out blank instruments which are placed in their hands for that purpose. They can also renew policies already issued, and when they do all this they bind the company. But the ordinary local or soliciting agent merely has authority to solicit insurance and submit applications to the company, or to a general agent. He cannot bind the company by any attempted acts or contracts in its behalf, not relating to the taking of applications.

The great difficulty you as the insured are in, is that you are bound to know pretty much what the agent's authority is. Lots of things will get by only so long as there isn't any fire. (Copyright, July, 1919, by Elton J. Buckley.)

The Annual Meeting of the Florists' Hail Association of America will be held in Arcadia Auditorium, Detroit, Michigan, at 9 A. M. on Wednesday, the 20th day of August, 1919.

JOHN G. ESLER, Sec.

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Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, sociology, pathology, landscape design, soils, plant chemistry and related subjects.

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New England grown stock. Order early as stock will be scarce. Pink Delight, Enchantress Supreme, Rosalia, Rosette, Benora, Doris, Beacon, Enchantress, Philadelphia, Matchless, White Enchantress, White Wonder, Miss Theo, Herald.

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Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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Pink and Lavender mixed, 2 1/2 in.	\$6.00	\$55.00
Pure White, 2 1/2 in.	7.00	60.00
Malacoides Townsendi, Shell Pink only, 2 1/2 in.	6.00	55.00
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1,308,909. Mower. Fred H. Landon, Tacoma, Wash.

1,308,921. Beet-Topping Device. Marion A. Smith, Salt Lake City, Utah.

1,309,177. Garden-Tool. Jos. P. Bertrand, Port Arthur, Ontario, Canada.

1,309,278. Grass-Hook. Horatio S. Earle, Detroit, Mich., assignor to H. S. Earle Mfg. Co., Detroit, Mich. a Corporation of Michigan.

1,309,468. Plow. Rufus C. Dunn, Vidalia, Ga.

1,309,498. Plow. John Calvin Waters, Epworth, Ga.

1,309,689. Attachment for Harvesters and Other Agricultural Machines. George W. Jory, Marysville, Cal.

1,309,831. Garden-Cultivator. James G. Alexander, Ames, Iowa, assignor to Alexander Mfg. Co., Inc., Ames, Iowa.

1,309,949. Fork-Attachment. Lewis Lattimore, Bonestead, S. D.

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GIANT SORTS IN SEPARATE COLORS

	Tr. pkt.	Oz.
Azure Blue	\$0.40	\$2.75
Black Blue40	2.75
Emperor William, blue.....	.40	2.75
King of the Blacks.....	.40	2.75
Peacock, blue, claret and white .....	.40	2.75
Snow Queen, pure white.....	.40	2.75
Striped and Mottled.....	.40	2.75
White with Eye.....	.40	2.75
Pure Yellow40	2.75
Yellow with Eye.....	.40	2.75

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ASPARAGUS PLUMOSUS NANUS

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5,000 Seeds, 13.75	25,000 Seeds, 56.25

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HORTICULTURE

Vol. XXX

AUGUST 2, 1919

No. 5

PROGRAM FOR THE BIG CONVENTION

The following is the program for the Thirty-Fifth Annual Convention of the Society of American Florists and Ornamental Horticulturists to be held at Detroit, Mich., August 19, 28, 21, 1919.

TUESDAY, AUGUST 19

2.00 P. M.

Invocation by Rev. J. M. Barkley.
Convention called to order by J. F. Sullivan, Secretary, Detroit Florists' Club.

Address of Welcome by E. A. Fetters, Vice-President S. A. F. and O. H.

Address of Welcome by The Hon. James Couzens, Mayor of Detroit.

Response by E. Gurney Hill, Richmond, Ind.

President J. F. Ammann's address.

Reading minutes of the Executive Board.

Report of the Secretary.

Report of the Treasurer.

Report of the Washington Representative.

Reports of the State Vice-Presidents.

Reports of the Standing Committees.

Report of Committee on Development of American Products.

Report of Committee on School Gardens.

Report of Committee on Nomenclature.

The Publicity Committees and The National Flower Show Committee will report at subsequent sessions.

Reports of Special Committees.

Miscellaneous Business.

Judging of Trade Exhibits.

Evening Session, 8.30 P. M.

President's Reception—The function will take place in the Hotel Statler. President Ammann wishes it to be distinctly understood that the reception will be informal, and that the most comfortable clothing will be the most appropriate to wear.

WEDNESDAY, AUGUST 20.

Morning Session, 9.30 A. M.

Nomination of officers for 1920.

Report of Committee on President's Address

Report of Committee on National

Credits and Collections Bureau, by R. C. Kerr, Chairman.

Discussion.

Report of Committee on Extension of the Affiliation Plan, by Joseph H. Hill, Chairman.

Discussion.

Address: "Selling Flowers by Telegraph," by F. C. W. Brown, Cleveland, O.

Discussion of Amendments to Constitution and By-Laws, and voting on same.

The following recommendation of the Executive Board is to be voted upon:

That the sum of \$5,000 be appropriated to the Publicity Campaign Fund, to be used only if needed during the year's Campaign.

Afternoon Session, 2.00 P. M.

Report of Committee on Publicity, by Henry Penn, Chairman.

Report of Publicity Finance Committee, by George Asmus, Chairman.

Discussion.

Addresses—"Publicity," by Major P. F. O'Keefe, Boston, Mass; Payne Jennings, Chicago, Ill.

THURSDAY, AUGUST 21

Morning Session, 9.30 A. M.

Election of officers for 1919. Polls open from 10 a. m. to 11 a. m., or until all in line have voted. Voting will be conducted under the new system. There will be four voting places, "A" to "D" inclusive; "E" to "K" inclusive; "L" to "R" inclusive; "S" to "Z" inclusive. Only members in good standing can vote.

Report of Judges of Trade Exhibition.

Report of the National Flower Show Committee, by George Asmus, Chairman.

Discussion.

Question Box.

Deferred Business.

Afternoon Session, 2. P. M.

Address—"Quarantine Order No. 37," by Dr. C. L. Marlatt, Federal Horticultural Board, Washington, D. C.

Address—"Opportunity of the Society of American Florists in Present Day Plant Propagation," by Prof. L.

C. Corbett, Bureau of Plant Industry, U. S. Department of Agriculture.

Discussion.

Report of Committee on Memorials, Michael Barker, Chairman.

FRIDAY, AUGUST 22.

On this day the members, with their families, will be the guests of the Detroit Florists' Club.

SPECIAL MEETINGS.

First Day, Tuesday, August 19.

9.30 a. m. Meeting of the Florists' Telegraph Delivery Association.

10.30 a. m. Opening of the office of the Ladies' Society of American Florists in Convention Hall. Registration of members.

Second Day, Wednesday, August 20.

9.00 a. m. Annual meeting of the Florists' Hall Association of America.

10.00 a. m. Annual meeting of the Ladies' Society of American Florists.

Third Day, Thursday, August 21.

9.00 a. m. Meeting of the Board of Directors of the American Carnation Society.

9.00 a. m. Meeting of the College Section of the S. A. F. and O. H.

While space in the Trade Exhibition has sold well, and most of the areas shown in the official plan have been reserved by exhibitors, there are still a few blocks for disposal, and correspondence regarding them should be addressed to Secretary Young, 153 Bates street, Detroit, which will be his mailing address until the close of the convention.

Membership cards have been sent to all the life members, and to all annual members in good standing for 1919. If any member has not received his card, he should communicate at once with the New York office, 1170 Broadway. Annual members who have not paid their 1919 dues will have cards issued to them immediately upon receipt of arrearages.

The Official Program for the Convention appears in the July issue of the society's "Journal," which was mailed last week over our member-

(Continued on page 110)

NEWS AND COMMENT

PICNIC OF BOSTON FLORISTS AND GARDENERS.

Perfect weather favored the members of the Gardeners' & Florists' Club of Boston, Thursday of last week, when the annual picnic was held at Cunningham Park in Milton. As a result the attendance was very large, over 600 being present, and the number of automobiles spoke well for the prosperity of the gardeners and florists. Refreshments were served, of course, and a long program of sports was carried out. The winners were as follows:

Baseball match. Commercial vs. Private Growers; 9 inning game. Score Commercial 6, Privates 2. Geo. B. Palmer, Captain Commercial; Albert J. Newell, Captain Privates.

Baseball match. Boys under 15; limited to 5 innings. Kenneth Craig's team beat Nelson Partsch's—score, 24 to 4.

Baseball match, Married vs. Single ladies. Single, Miss Eisenhardt, Captain, 5; Married, Mrs. J. Coles, Captain, 4.

Quoit match, individual. Captain, George Melvin. W. C. Rust, Frederick Cave.

75 yard race for girls over 12 and under 15 years; Alice Brown, Marion Iliffe, Dorothy Goode.

50 yard race for boys under 8 years; E. J. Rogean, A. Rogean, C. Hourahan.

50 yard race for girls under 8 years; Margaret McKenzie, Catherine Callahan, Anna L. Norberg.

75 yard race for girls over 10 and under 12 years; Ruth Brown, Helen Peters, Elizabeth Shand.

75 yard race for boys over 10 and under 12 years; Nelson Bartsch, Norman Craig, G. Hyness.

50 yard race for girls over 8 and under 10 years; Dorothy Coles, Mabel Noyes, Elsie Waldecker.

50 yard race for boys over 8 and under 10 years; Mario Pedersini, Thomas Meade, J. Hyness.

100 yard race for club members under 30 years; Edward Norberg. T. S. Brain, J. F. Slayter.

100 yard race for boys over 12 and under 15 years; Walter Swan, Prescott Whyte, R. Swan.

75 yard race for married ladies, Mrs. J. F. Coles, Mrs. Rogean, Mrs. O. Sutherland.

75 yard race for girls 15 years and over; Edith Iliffe, Mary Flood, Elsie Bartsch.

100 yard race for boys over 15 and under 18 years; Carl Christensen, Donald Rust, A. K. Rogers.

Flag race for girls under 15 years; Dorothy Woods, Doris Bartsch, Dorothy Coles.

100 yard race, club members only; Victor Huerlin, George B. Palmer, Thomas Milne.

Potato race for boys under 15 years; Orpheus Rossi, Kenneth Craig, Walter Swan.

100 yard race for men 175 pounds and over, handicapped; Victor Olsen, A. K. Rogers, James Methven.

Obstacle race; E. F. Norberg, T. W. Little, W. H. Golby.

Tug of war; Commercial Growers vs. Private Gardeners. Privates won easily.

Soccer football; twenty minute game. Captains, John Miller, John R. Ness. A draw. No score made.

50 yard race for girls under 12, open to members' and friends' children; Hilda Smith, Elsa Waldecker, Dorothy Coles.

50 Yard race for boys under 12 years open to members' and friends' children; Nelson Bartsch, Archie Will, Orpheus Rossi.

Ringmaster, H. H. Bartsch; Handicapper, James Methven; Starter, William Caldwell; Clerk, W. N. Craig; Umpires for Men's and Ladies' baseball games, F. E. Estey, G. W. Hamer; Umpire for Boys' baseball game, Peter Perderzini; umpire for football game, Walter Jack.

Judges, H. H. Bartsch, F. Cave, J. Donald, K. Finlayson, S. J. Goddard, G. W. Hamer, W. H. Judd, J. R. Ness, W. C. Rust, F. E. Palmer, C. P. Sweetser, F. Allison, J. L. Russell, T. W. Little, W. H. Golby, Harold Ryan, Richard Calvert, R. J. Daly, P. W. Burke.

General Picnic Committee, A. K. Rogers, C. P. Sweetser, W. H. Judd, P. Methven, James Wheeler, G. W. Hamer, W. H. Bartsch, Walter H. Golby.

The prizes were presented at 6 p. m. by President Rogers, after which several speeches were made.

PHILADELPHIA.

There are street florists of various degrees and standing—the best of them having permanent stands and display cases, etc. A new and ambitious adventure in this line recently is that of our Grecian friend, Pete

Maltos, whose new display case and office combined has just been erected at the S. E. corner of Broad and Chestnut streets. It is an ornament to the location and a credit to the proprietor. We wish him all prosperity.

The return ball game between the Niessen and the Pennock nines will take place on the grounds of Elmer, Gaehring at Frankford Athletic Club, Branchtown, Pa., the last Saturday in August.

Frank M. Ross is erecting a new building on his old flower store site on South 52nd street. Manager Gaul and the rest of the 52nd street forces are located temporarily at the Ross store on 60th street, where all F. T. D. orders should be sent for the present.

We had a pleasant visit this week from Arthur E. Thatcher, late of the Arnold Arboretum, Boston. He is now superintendent of an important private estate and has been on a tour of inspection of the prominent nurseries and other establishments, with an eye for anything that's new and interesting.

Howard M. Earl's latest title is "Ambassador." That trip through Europe and South America was bound to add something to the "Steam Tug," "Little Cupid" and other distinctions already affectionately bestowed on this live wire of the seed trade. We extend our congratulations.

The final obituary ceremonies on the late George Anderson took place at his home, 52nd and Woodland avenue, on the 23rd inst. and was largely attended by men prominent in all branches of the trade. Among the pallbearers were John Burton, George Craig, Dennis Connor, Mark Mills, Edward Reid, and other old friends. Interment was at Mt. Moriah cemetery. The real estate of the deceased remains in the family but the business has been discontinued and the greenhouses sold off.

Recent visitors have included Parker Thayer Barnes, Harrisburg, Pa.; John Walker, Youngstown, O.; J. J. Fallon, Lynchburg, Va.; Arthur E. Thatcher, Boston, Mass.

For a midsummer week the cut flower trade here was very satisfactory and all stocks cleaned up nicely. The leaders in roses are still Russell, Premier and Columbia. Killarneys are also holding their own pretty well and Ophelia is extra good. Carnations are scarcely to be seen but the asters are now filling that gap very nicely. Some very good stock to be seen now in asters, the last 10 days having made a great difference. Gladioli all to the good and showing up in great fettle. The best sellers are the straight colors—solid reds, whites, yel-

lows, etc. Growers should note this in making their arrangements for next season.

Among the early bulbs to be seen around the seed counters at present are *Amaryllis vittata* and *Johnsoni*, *Oxalis*, *Grand Duchess*, *Bowick* and *Buttercup*, *Freesia*, *Purity*, *Lilium Harris*; not many so far, and from all accounts the crop deliveries are not expected to run over 10 to 20 per cent of contract orders.

ENFORCING THE QUARANTINE

Lily of the Valley Clumps Must Be Free from Sand, Soil or Earth.

Dear Sirs:—

Regulation 3 of the rules and regulations supplemental to Quarantine 37 provides that the nursery stock and other plants and seeds specifically mentioned therein, including lily of the valley, may be imported under permit when free from sand, soil or earth.

Since lily of the valley clumps practically always carry more or less sand, soil or earth, importers are warned that such clumps imported under the provisions of this regulation will be thoroughly inspected upon arrival in this country, and if sand, soil or earth is found adhering to the roots the shipment may be refused entry.

It is suggested that lily of the valley be imported in the form of pips rather than clumps, and that they be thoroughly cleaned by washing so as to insure their freedom from sand, soil or earth.

Yours very truly,

C. L. MARLATT,
Chairman of Federal
Horticultural Board.

INDIANA S. A. F. NOTES

According to reports coming to the office of State Vice-President Nehrling, Indiana will be well represented at the coming S. A. F. convention. It is estimated that about fifty from Northern Indiana alone will make the trip. Quite a number will go by auto as the roads are reported to be in excellent condition.

A committee consisting of Irwin Bertermann, Adolph Baur and Oscar Carlstedt has been appointed by A. H. Nehrling to look after transportation and other matters pertaining to the convention. This committee has practically decided on a night trip via "Big Four" railroad leaving Indianapolis at 9 p. m. August 18th and arriving in Detroit early the next morning.

Information regarding rates, etc., can be obtained by consulting members of the committee.

USE THE POST CARD.

How Retailers Can Help Their Correspondents and Themselves

Many members of the F. T. D. complain about retailers not confirming orders upon receipt of same and do not send a bill immediately after deliveries are made.

How can members pay bills promptly if they do not receive a bill in time and how can shippers know whether delivery is made at the other end when they never have the order confirmed or a bill sent. Why not do business in a businesslike way? It is only a question of getting used to it.

If you receive an order from another retail florist confirm it at once and put his mind at ease and let him know that you are taking good care of his order. Use Postal Card No. 1.

City, State.....19

We are pleased to acknowledge receipt of your order

for
to be sent on.....
to

We will execute this order so it will be a credit to you as well as ourselves.

Thank you for same and oblige,

Yours very truly

Send a return postal card to your customer's friend where flowers are to be delivered. It is one of the greatest pleasures to receive this postal stating that your brother florist at the other end has made a good delivery, if not you can immediately take it up with your brother florist and he can make good before your customer gets a chance to kick. Follow up Postal Card No. 2.

City, State,19

We have telegraphed an order to you
calling for
to be sent to.....

Name

Card

We hope you will execute this order so it will be a credit to you as well as to us.

Yours very truly,

If you telegraph an order follow it up with a postal card to the one who is to make delivery in many cases which postal will reach them before delivery is made, and it will be time enough to correct mistake made by telegraph operator in misspelling, etc.

Use Return Postal Card No. 3. Send

to party flowers are to be delivered to.

Gentlemen:

The order for flowers delivered by
has arrived in.....
.....
Remarks:

Yours truly,

Date and Time

City, State, Address.....

We had our correspondent in.....
.....
deliver to your address.....

We are very much interested in the orders of our patrons and will consider it a great favor if you will kindly let us know by return postal how your order has reached you.

Thanking you for this favor, we are,
Very truly yours,

ROCHESTER.

The Rochester Florists' Association will hold their picnic at Grand View Beach on the afternoon of Aug. 12th. Lunch will be provided by the association and all retail and wholesale stores will close at noon.

Cecil Lester has returned from a business trip for Hart & Vick. Dewey Lester is now employed at Geo. B. Hart's greenhouses, Fairport. Horace J. Head is spending his vacation at Hilton, N. Y., and Toronto. Mrs. Bashford of Rochester Floral Co. was in Buffalo last week. P. M. Phillips, Roseville Pottery Co., Zanesville, O., was a visitor last week.

There is little change in market conditions. Carnations are poor, but roses are improving. Good home-grown sweet peas are quickly disposed of.

NEW ENGLAND.

Monroe, Inc., of New Haven, Conn., has filed a certificate of incorporation. The company will deal in flowers and nursery stock. The authorized capital stock is \$25,000, divided into 250 shares of \$100 each. Business will be started with a capital of \$20,000. The incorporators are Charles Munro, E. Johnson and Olaf Undrum.

An addition is to be made to the greenhouse on Holden street, Worcester, Mass., owned by Wm. N. Esterbrook, Woods street. It is to cost about \$3,000.

Lord & Burnham are to build a greenhouse for Robt. T. Pine in Brookline to cost, it is said, \$7,000.

HORTICULTURE

Established by William J. Stewart in 1904

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There is food for much thought in the article prepared by Miss M. R. Case in the last number of *HORTICULTURE* wherein she dealt with the various ways by which the work of the Massachusetts Horticultural Society might be extended. Truth to tell, what she said might be considered carefully by similar societies in all parts of the country, for there is plenty of opportunity for improvement if these organizations are to come into close touch with amateur gardeners as well as professional growers and meet the full measure of their opportunities at this particular time, when interest in gardens, fruit growing and the improvement of home grounds is greater than at any other time in the history of the country, perhaps, and is being fostered in many ways.

There is no reason why this movement should not be lifted to a higher plane and given an impetus in the direction of gardening aspirations such as have been developed in England, and which have led all classes of people to take a genuine interest in novelties as well as standard plants; and as a result of which the body of gardeners dictates to the trade and to the garden publications rather than passively following their lead.

A suggestion of Miss Case that there be a demonstration at each of the shows is especially worth while. Such a variation from the usual plan of simply displaying the groups of cut flowers would certainly attract a very much larger number of people and would serve to help them meet their gardening problems in as direct a way as by any means which could be devised. It is quite probable that the Agricultural Colleges, Horticultural Schools and similar institutions would gladly co-operate by providing demonstrators for such occasions. More or less work of this kind is always done in the spring, often at a time when attendance is difficult. Moreover, so great a mass of material is presented at such times that much of it remains undigested, and has been forgotten when the time comes to apply it.

No good reason appears why some of the ideas presented by Miss Case through the pages of *HORTICULTURE* should not at least be tried out. We believe that the results would justify going farther along this line.

Bad check artists

Why is it that florists are so often chosen to be the victims of bad check artists? Is it because they are reputed to be less careful in their financial dealings than people in other lines of business? Or do they have the reputation for being especially soft hearted and unsuspecting? At any rate they are continually being imposed upon and sometimes to the tune of larger amounts than even a successful florist likes to lose. The methods employed vary somewhat with the operator, but a happening just reported from Woburn, Mass., is typical.

It seems that a man giving his name as William P. Forrester went into the store of Edward L. Aylward and ordered flowers valued at \$35.00. In payment he tendered a check drawn on a Fall River bank. Aylward requested him to get the check cashed at the Woburn National Bank, across the street. The customer left the store and when he returned said that the cashier at the bank said he would accept the check if Aylward would endorse it. This the latter did. Then the customer took the check to the bank and had it cashed. The amount was \$135.00, just an even hundred more than the cost of the flowers ordered. When the cashier of the bank got into communication with Fall River, he found that no funds were on hand to meet the check and the Woburn man undoubtedly will have to stand the loss.

It would be said naturally that it was a careless thing for the florist to do, and no doubt it was. Nevertheless every now and then reports of some such occurrence are received at this office. It would appear as though florists should exercise more than usual care from now on, for these bad check men are evidently finding their business an easy and profitable one.

Verb. Sap

I had finished reading in the Transactions of the Massachusetts Horticultural Society the first paragraph of the "John Lewis Russell Lecture" (for the year 1919), entitled "Protecting American crop plants against alien enemies" by Dr. B. T. Galloway, and was glancing over the morning paper with its daily record of accidents when I began musing on the risks I ran in my daily ambulations. By careful calculation, duly checked and counter-checked, I found to my amazement that in my morning walk of about one mile I ran no fewer than 313 risks, everyone of which fraught with fatal possibilities. Since I had to essay the return journey they were exactly doubled, which made a total of 626 risks. Being a careful man with a wife and family dependent upon me for support I was all the more astonished at not having thought of this matter before. Obviously I owed it to my family not to incur danger, so I decided that henceforth, I would remain in my home and thus eliminate all risks. Having comfortably settled this most momentous question to my satisfaction, I was beginning to feel quite happy again when, suddenly, a terrible truth flashed across my mind. If I stayed at home I would soon have no income with which to support my family and self; also the home might burn down! In despair I picked up the "John Lewis Russell Lecture" again and fell to thinking of what might have been the condition of this country had its early settlers, fearing the "alien enemies" prohibited the introduction of such crop plants as Wheat, Barley, Oats, Peas, Sugar, Peach, Apple, Pear, Citrus fruits and a score of others.

E. H. WILSON

P. S. Corn and Potatoes as a steady diet don't appeal to E. H. W.

THE
EARLY KING
(Burpee's)



Burpee's Sweet Peas

The Twenty-Two Best Winter Flowering Spencer Sweet Peas for Florists

The first Spencer Sweet Pea in existence was brought to America by W. Atlee Burpee. Since then the House of Burpee has introduced over two hundred distinct new varieties each an improvement on the past. And by constant hybridizing for the last ten years we have developed the new Fordhook Early Flowering strain of Spencer Sweet Peas. We can now offer you all the finest colors in the Early or Winter Flowering type of Spencers—everything offered is grown on our own Floradale Farm in California. The House of Burpee is recognized as the American Headquarters for Sweet Peas.

3390 EARLY SANKEY (BURPEE'S). This truly magnificent white was awarded a special Silver Medal when exhibited at the great International Show in New York, March 20, 1915, also Certificate of Merit at the Spring Show of the Pennsylvania Horticultural Society, Philadelphia, March 23, 1915. Black seeded. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3392 IMPROVED EARLY SNOWSTORM (BURPEE'S). The result of a cross between King White and Yarrowa, it embodies the best qualities of those two varieties and easily eclipses all early-flowering white Sweet Peas to date. The flowers are of Yarrowa size, but finer form, as the standard does not reflex but is magnificently bold, though charmingly waved. A vigorous grower, the immense flowers are invariably borne in fours on very long stems. Awarded Certificate of Merit at the International Show, New York, March 20, 1918. Our Improved Snowstorm is so immeasurably superior to our original Snowstorm that we have now discarded the latter. Improved Snowstorm is the last word in Early-Flowering White Sweet Peas. Pkt., 10c; oz., \$1.50; ¼-lb., \$4.50; lb., \$15.00.

3342 EARLY CANARY BIRD (BURPEE'S). This is a splendid, rich, deep cream or primrose colored self. The flowers are of great size, beautifully waved, and usually borne three or four on a stem. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3348 EARLY DAYBREAK (BURPEE'S). The flowers are much frilled or waved, of largest size. The color is a splendid shade of rich rose-pink on cream ground, becoming deeper toward the edge of standard and wings. The entire flower is lightly suffused with salmon. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3376 EARLY LOVELINESS (BURPEE'S). The color is white, the entire flower being suffused soft pink and the edges distinctly plicated with rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3351 EARLY ENCHANTRESS (BURPEE'S). It is a bright rose-pink, becoming deeper toward the edges of standard and wings, gradually softening in tone toward the center of the flower. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3383 EARLY PINK BEAUTY (BURPEE'S). The color is soft rose pink on white ground, richer toward the edges, gradually softening in color as it reaches the center of standard and wings. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3344 EARLY CHERRY RITE (BURPEE'S). A particularly bright and taking color and quite new in this section. It might be described as a glowing cherry or salmon-cerise self. Awarded Certificate of Merit at the International Spring Show, New York, March 20, 1918. Pkt., 10c; oz., \$2.50; ¼-lb., \$7.50; lb., \$25.00.

3381 EARLY ORANGE BEAUTY (BURPEE'S). Similar in color to Helen Lewis, therefore a glowing orange-scarlet with softer colored wings. Extremely free and early blooming, valuable alike for culture under glass or in the open, as it withstands the sun and weather well. Pkt., 14c; oz., \$3.00; ¼-lb., \$9.00; lb., \$30.00.

3362 FORDHOOK ROSE IMPROVED (BURPEE'S). Quite distinct from our original Fordhook Rose. The flowers are of immense size, usually borne in threes and fours on very long stiff stems. In color similar to the well-known George Herbert. A pleasing shade of rosy carmine. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3374 EARLY KING (BURPEE'S). The finest early-flowering crimson. The flowers are of great size, perfect form, averaging fully two inches in diameter. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3393 EARLY SPLENDOR (BURPEE'S). A magnificent new deep rose self. The rich rose-crimson color is accentuated by the distinct white blotch at the base of standard and wings. The flowers are of great size, usually borne in fours on very long stems. Similar in color to the Summer-flowering Rosabelle. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3386 EARLY ROSY MORN (BURPEE'S). Flowers grown under ordinary field culture have measured fully two inches in diameter. The flowers are usually borne in threes or fours on stiff, long stems. Color, a pleasing shade of rose with crimson-scarlet standard. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3375 EARLY LAVENDER KING (BURPEE'S). A first-class lavender has been much wanted in this type, therefore we have great pleasure in offering the new Lavender King. This glorious new variety is a rich, true, deep lavender throughout. Similar in color to the summer-flowering varieties, Burpee's Orchid and R. F. Felton. The flowers are of large size, beautifully true waved form, and borne in threes and fours on stems of great length. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3338 EARLY BLUE-BIRD (BURPEE'S). This is a charming shade of blue. Somewhat deeper than Wedgewood, but more of a true self, especially as the flower ages. In our opinion, the best blue for indoor culture. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3399 EARLY ZEPHYR (BURPEE'S). This is a delightful shade of pale blue or lavender. It might be briefly described as a silvery blue self. An extremely dainty and charming variety. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3380 EARLY MAUVE BEAUTY (BURPEE'S). Color a pleasing shade of rosy mauve. The flowers are of immense size, often measuring two and one-half inches in diameter, yet exquisitely waved and of best Spencer form. A strong, vigorous grower and very free flowering. Charming under artificial light. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3346 EARLY DAINTINESS (BURPEE'S). This has always been a favorite since it was first exhibited in 1915, when it was certificated. We have only now been able to work up a sufficient stock to offer to our friends. A strong grower, with flowers of largest size and usually produced in fours. Color, pure white edged rose. Similar to Summer-flowering Dainty. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3352 EARLY EXQUISITE (BURPEE'S). The ground color is a soft shade of primrose, the edge of the standard and wings being beautifully "plicated" with deep rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3361 FORDHOOK PINK AND WHITE (BURPEE'S). This is similar to the old Blanche Ferry, having a bright, rosy-pink standard with white wings, lightly suffused rose. Pkt., 7c; oz., 60c; ¼-lb., \$1.80; lb., \$6.00.

3398 YARROWA. The flowers average two and one-half inches in diameter; many are duplex or double. The color is a bright rose-pink with a clear, creamy base. Our stock of this popular Australian variety is absolutely true. Grown by us from seed procured direct from the introducer. Pkt., 7c; oz., 75c; ¼-lb., \$2.25; lb., \$7.50.

3357 EARLY FANTASY (BURPEE'S). Striped and marbled with rich rose-pink on a creamy white ground. Extremely bright and it makes a telling bunch when cut. Extremely free and a continuous bloomer, the flowers usually borne in threes and fours on long stems. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

The prices quoted are net for packets as well as larger quantities, f.o.b. Philadelphia, for delivery July to December. The above varieties—each the best in its class—provide a complete range of colors. We have many other desirable varieties of Early Flowering Spencers on which we shall be pleased to quote prices upon request.

W. Atlee Burpee Co.,

Seed Growers Philadelphia.

ROSES UNDER GLASS

By ARTHUR RUZICKA

The continued and uninterrupted rains day after day that we had the week beginning July 15, have delayed planting here and there where it had still been unfinished. Now, however, no time should be lost in finishing up whatever planting is still to be done, for young rose plants or transplanted old plants should be all in by the first of August if at all possible, so that they have a chance to get established before the winter sets in. By "established" we mean nothing else than a good root system without which no plant can grow well.

Do not be in too much of a hurry and neglect to clean the benches well, see that there is no old soil left in the benches, and that all of the soil that dropped through is removed. Wash out the benches well and then apply a good thick coat of lime to which can be added a little copper sulphate or bluestone as it is sometimes called. The latter should first be dissolved by placing it in a bag and suspending it in a tub of water, using a wooden tub, for galvanized ware or tin ware will soon get eaten up by the bluestone. Afterward the dissolved copper can be added to the lime as needed. Do not neglect thorough cleaning, for if we had a spell of rainy weather right in July, we may be in for more of it later, and dark wet weather and roses do not go together very long especially if the houses the roses are going to be in are not clean so disease can start in very easily and is hard to eradicate.

Drainage.

Make sure that there is sufficient drainage in the benches. If they are raised benches, see that the boards are far enough apart to insure proper drainage, and if the benches are solid, see that the drainage underneath the soil is porous and that no drains are stopped up. It will be too late to wait until next winter to find out. Right now while the recent wet spell is still fresh in our minds (at least here in northern New Jersey) let us go over the drainage outside. More places have failed in growing roses or perhaps other greenhouse goods because of bad drainage than anything else. Places have been built over poorly drained ground, and no provision made for carrying off surplus water. Many a dismantled greenhouse would be a going concern today if the builders had only selected a different location or else installed a proper drainage sys-

tem. If your place is poorly drained, do not stop to do anything else until sufficient tile is laid, enough trenches opened to carry off all surplus water at all times. Merely placing tile is not sufficient. Make sure it is the right size and large enough to allow for any emergency that may arise, for a rose range should never under any conditions have a lot of stagnant water around it or under it.

I remember one place where roses would always mildew, and as far as the owner could see without any visible reason. And yet when we took a shovel, went into one of the houses and dug a hole two feet deep in the heavy clay, it was not long before the hole filled with clear, almost ice cold water, and there lay the whole solution of it. The place was never dry under the benches, and the cold ground with the heat over it in the fall was enough to give the roses something worse than mildew, and then there were no trenches between the houses to carry water away and no provision made to take care of rain water off the roof, it just ran off as best it could. The place in question is vacant now, after thousands of dollars were spent trying to make it produce.

See that all cellars are properly drained and where a cellar or boiler pit is so built that there is no way to drain it, install a water pressure suction pump or some other apparatus that will take care of the water whenever necessary. One large commercial carnation place nearly froze one spring because water got into the boiler pits and put most fires out; only smudges of tobacco stems and oil stoves saved the place, and then with a heavy loss of a crop for the flowers were nearly ruined by the smoke and fumes. Get after the drainage and if there is no one on the place able to handle it, get a civil engineer to advise you regarding drainage, the money paid him will be nothing compared to the saving that will be made through increased crop production.

The Heating Plant

Speaking of boilers, it is high time now to see that they are in perfect condition for the coming winter, for it soon will be necessary to start up the fires. In fact the way the weather has been it would have been well to have a steam pipe around the houses right in July, seems ridiculous but it pays to keep the houses in good healthy condition. Clean out the boil-

ers, and take down the smoke pipes on the smaller boilers so they can be cleaned and clean the pipes on the large boilers just the same way. See to it that the grates are in good working condition.

On bricked in boilers, see that the brick work is all that it should be. All badly burned or broken fire brick should be replaced and properly cemented with fire clay. Do not try and "get by," it will pay better to make a good job of it so there will be no cause for worry next winter.

Painting

If the weather at all permits, try and get a little painting done this fall, if the place needs it at all, and we have yet to find a place that is not in need of paint, one section or another.

There are many really good roofing and glazing cements on the market that can be applied quickly and easily and are not expensive so there is no reason why houses should be leaking like a sieve when they can easily be tightened up. Repair all broken glass first, as it is not a very pleasant job to repair glass after the cement has once been applied. Then paint the woodwork inside and out wherever the cement does not cover it, and if applied right it should merely touch it on each side of the bar, uniting the bar and glass with a waterproof elastic film. The rainy spell we have had showed up all the leaks in the roof if there were any, so see that the roof gets a coat of tar if it needs it and some sand. Apply the tar hot, and then scatter the sand on while the tar is still soft. This will give the roof a wearing surface that will add years to its life.

DWARF CHERRY TREES.

At Hillcrest we would like to know more about dwarf cherry trees. How those having grown them have liked them and where they can be had? We believe that they are rather short lived trees but our plan would be to plant a few each year as we do with our peaches. Of those we plant a dozen every spring. This autumn we wish to plant a dozen, dwarf, sweet cherry trees. Our preference for the dwarf trees over the standards is that we think it would be easier to protect their fruit from the squirrels and birds by covering the trees with cheesecloth or netting while the fruit is ripening.

M. R. CASE.

Hillcrest Farm, July 17th, 1919.

GOOD POT PLANTS FOR THE TRADE

This question is quite a comprehensive one if fully replied to. In the following partial list some of the most desirable species and varieties are given; the most common method of propagation, also the approximate date for starting cuttings or seed, with brief notes as to their comparative merit as pot plants.

Cyclamen.

The giant strains of these are usually grown, the colors ranging from pure white to various shades of pink and deep crimson. One of the best selling and best paying florists' plants, if good strains are secured, and the plants properly grown. Grown from seed started in August or early September. It takes from 14 to 18 months from time of sowing the seed to produce flowering plants. Flowering season November to April.

Primulas.

Primulas are among the most popular and best paying pot plants. There are several types that are especially suited for decorative work. *P. malacoides*, of comparatively recent introduction (1902), is probably the best, as its delicate spikes of lavender pink to white can be used for short time, cut flower work. As a table or window plant it is hard to beat. *P. sinensis*, better known as the Chinese Primula, comes next, while *P. kewensis*, with its golden yellow flowers, is also useful. Seed of any of these primulas can be sown from early in March to end of May. July and August are not good months for starting primula seed. Sown later than this they do not come in early enough to prove profitable, as primulas do not sell well after the end of April or early May.

Cinerarias.

Showy, effective pot plants, but subject to green aphid and red spider. *C. grandiflora*, the large flowering kind, is being largely superseded by *C. stellata* and its variations. Seed may be sown from middle of June to middle or end of August. *C. stellata*, with its large, many flowered heads of many hued flowers, makes a very effective window or conservatory plant from February to April.

Calceolarias (Herbaceous).

These are coming rapidly into favor as window or house plants. For a cool conservatory they are gorgeous and are good sellers. These together with the shrubby calceolarias, are among the commonest window plants

in England. Seed of herbaceous calceolarias should be sown during June or July. Season of flowering, March and April.

Schizanthus (Butterfly Flower), Mignonette, Snapdragon and Calendula (Pot Marigold) come in useful for early spring sales if seed is started end of July or during August.

Pansies.

For early spring sales seeds of these should be sown toward the end of August in a cold frame, or flats out of doors. In warmer sections they winter over very well in a cold frame with care. The plants are usually sold in plant boxes six to twelve plants in a two-quart box. Grown well from a good strain they sell well in early spring with only one or two blooms developed. Seed sown in February or early March will furnish nice plants for spring planting for summer and fall flowering in borders.

Begonias.

The semperflorens (*Erfordii*) type is probably the best money-maker for the florist and most satisfactory for the flower buyer. Seed sown in January or February will furnish an unlimited supply of plants for summer bedding, while seed sown later in May or June will give a good supply of plants for winter and early spring sales if properly handled. Sow seed of the tuberous rooted type in February or March, and start old tubers March or April.

Gloxinias.

These require much of the same treatment and care as the tuberous rooted begonias, but are not as profitable as many of the kinds before mentioned. They make a gorgeous display when well grown.

In addition to the kinds mentioned, fancy pelargoniums, chrysanthemums, fuchsias, geraniums, lilies, Dutch bulbs and many others might be named. Those mentioned are among the most prominent pot plants suited for the ordinary florists' trade. Carnations and roses can scarcely be classed as suitable for pot plants, being more useful for cut flower purposes. For spring sales in plant boxes or flats, or singly in pots for spring and summer bedding, snapdragons, pentstemons, ageratum, salvia, centaureas, golden feather, as well as many annuals such as asters, phlox drummondii, ten week stock, schizanthus, zinnia and other annuals should be sown in March or early April.

—Canadian Florist.

TIMELY GREENHOUSE NOTES.

Take cuttings now for next year's geraniums. This will give the plants time to make up another good batch in September. Trim the cuttings up well, and cut below a leaf joint. Place them in sand, soak well with water and break only the direct rays of the sun from them. Keep slightly on the dry side until they begin to root, as there is less likelihood of their damping off. Give a thorough watering and then wait until they are dry before giving any more. Grow in a light airy house, and by the middle of October you will be able to take a cutting from every one. They should be well rooted in about a month, when they should be potted firmly in 2½ inch pots, using good loam.

The carnation houses should be refilled without delay. Most growers are engaged just now in replanting their houses or at least in refilling the benches preparatory to replanting. It is much better to let the plant draw its first moisture from the new soil rather than to saturate it before planting. Do not dip the roots in water if the carnation field is near the house, but get them planted as soon as possible. It is probably better to dip them, however, if they have to be out of the soil for four or five hours.

From the time the chrysanthemum buds make their appearance until they begin to show color, the plants need feeding from time to time. A prudent use of liquid manure will make a decided difference in the size and color of the flowers, also producing the dark green foliage and heavy stems which go with the ideal flower. When the stock is in good condition liquid manure may be made by placing half a bushel of cow manure in a barrel with 45 to 48 gallons of water. If sheep manure is used, half the quantity will be sufficient. There is no better stimulant than liquid cow or sheep manure. Let it stand a few days before using. It is best to start with one application a week, increasing to two or even three.

Pansies for outdoor blooming next spring, English daisies and forget-me-nots may be sown now. They can be sown in a frame, the top surface being made light by the addition of some leaf mold and sand. One of the best forget-me-nots for early blooming is *Myosotis dissitiflora*, and it will also pay to have at least a few Giant Flowering Bellis. When large enough to handle, transplant the little ones to about four inches apart, and let them remain that way without much protection through the winter.

THE GARDENERS' SECTION

THE GARDENERS' CONVENTION.

The plans for the annual convention of the National Association of Gardeners to be held in Cleveland, August 26-28, are nearly completed. The Hollenden has been selected as the association's headquarters and convention meeting place.

Tuesday forenoon and afternoon, and Wednesday and Thursday forenoon will be devoted to business. On Tuesday evening, J. Otto Thilow will deliver his lecture on "The Flora of Hawaii" to which the public will be invited. On Wednesday evening the annual banquet will take place. The local committee composing R. P. Brydon, W. E. Cook, J. Fisher, R. Poole, T. M. Rowe, H. P. Rapley, J. Hamilton, A. Brown, appointed by President Robert Weeks, is providing the entertainment features for the visiting members and friends.

Among the business to be brought before the convention is the proposed co-operation between the country estate owners and the national association; the future policy and operation of the Service Bureau, maintained by the association; the practicability of providing examinations for members of the profession; the question of how young men can be induced to take up the gardening profession.

Among the speakers will be Sidney S. Wilson, vice-president, Associated Advertising Clubs of the World, former president, Cleveland Advertising Club, who will talk on "How Can the Gardener Best Advertise His Profession?" and Edwin Jenkins of Lenox, Mass., on "How Can We Interest the Young Men in Our Profession?" Quarantine Bill No. 37 will be discussed by a speaker to be announced later.

Members should not delay in making reservations for hotel accommodations, and should apply to James Fisher, chairman, Hotel Reservations Committee, 10,504 St. Clair Ave., Cleveland.

CLIMBING ROSES.

Dear Sir:—

Reading the list of climbing roses in the collection of S. S. Pennock it occurred to me that a list of the varieties in my collections at Boston, June 21, and Newport, June 25, both of which were awarded a silver medal, would be of interest to the readers of *Horticulture*. Varieties follow, 33 in number: Silver Moon, Dr. W. Van

Fleet, Christine Wright, Mary Lovett, Climbing American Beauty, Climbing Lady Ashtown, Bess Lovett, Ruby Queen, May Queen, Tausendschon, Baroness von Ittersum, Source d'Or, Goldfinch, Oriole, Electra, Robt. Craig, Prof. Sargent, Jersey Beauty, Edwin Lonsdale, Carmine Pillar, Sanders White Rambler, Petit Louis, Climbing C. Soupert, Francois Guillot, Climbing La France, Wm. C. Eagan, Trier, Le Mexique, Gerbe Rose, Schiller, Dawn, Wedding Bells, Miss Helyett.

I have sixty varieties, all told, a good many of which bloom too late in the season for the rose exhibits.

We have been having an excess of rain for the last three weeks. Very heavy showers and often a regular downpour. The vegetable gardens are flooded here, where they had to be artificially watered last year to keep them from drying up. On the other hand, our rose garden, having a good drainage, has been benefited by the rain. Looking across them the top is fairly bristling with new growths; we have never seen them as well before at this time of the year.

Quite a few of them are putting on another crop of buds as a result of the quite English climate we have been having.

C. F. Meyer is well covered with buds on the new wood, and coming on fast.

Gerbe Rose, a large, double, delicate pink rose, has new buds on all the laterals from the old wood that just finished blooming.

Dawn, a large single deep pink hybrid tea (Pillar rose), is also well covered with buds.

There are many other that will bloom later if conditions are good then.

Yours truly,

A. J. FISH.

New Bedford, Mass.

BIG COLLECTION OF GLADIOLI.

The gladiolus collection at the New York Botanical Garden is planted this year along both sides of the path bordering the war memorial grove of Douglas spruce. The most convenient entrance is from Southern Boulevard, nearly opposite Fordham Hospital, where the collection of cannas is planted.

The gladioli as exhibited here comprise 243 kinds grouped in thirteen beds, containing some 21,000 plants.

The kinds of the primulinus type, the earliest to flower, are now in bloom and the other types will follow consecutively, continuing until late August or early September. The greatest display is to be expected during the first and second week in August.

The canna collection, in which forty-one kinds are represented with about 2,000 plants, is now rapidly coming into bloom. Close by the cannas a new plantation has been established illustrating variegations. For this purpose plants with variegated foliage of many kinds, both hardy and tender, were selected and grouped in a plot along the path leading north to the Herbaceous Garden.

ORNAMENTAL FRUITS.

Trees and Shrubs Decorative in the Late Summer and Fall

Writing in the *Arnold Arboretum Bulletin* about the decorative value of fruiting trees and shrubs, Prof. Sargent says:

The ripening and ripe fruits of many hardy trees and shrubs are as beautiful and often more beautiful than their flowers; and such plants have a double value for the decoration of northern gardens, especially the gardens of the northern United States. For the climate of this part of the world is suited for the abundant production and high coloring of the fruits of our native trees and shrubs and those of northeastern Asia; and European plant lovers who come to the Arboretum in summer and autumn are always astonished and delighted with the abundance and beauty of the fruits they find here. The list of trees and shrubs with handsome fruits which can be grown in New England contains many species of Holly, Ribes, Viburnum, Cotoneaster, Cornus, Malus, Sorbus, Amelanchir, Aronia, Rosa, Prunus, Rhus, Crataegus, Ampelopsis, Berberis, Magnolia, Acer, Acanthopanax and Lonicera. On the Red and White Maples the fruit ripens early in May, and until the first of November there will be a succession here of ripening fruits. The fruits of a few trees and shrubs will remain on the branches and keep much of their brilliancy until early April, and there is therefore only a few weeks during the year when one cannot find showy fruits in the Arboretum.

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It is not perhaps generally realized that the fruit of several Honeysuckles is more beautiful than their flowers, and that among the species which are bushes and not vines are plants perfectly suited to this northern climate which are not surpassed in the abundance and brilliancy of their fruits by any plants which ripen their fruit in summer. The Honeysuckles which produce the earliest and the showiest fruit are *Lonicera tatarica* and some of its hybrids. The Tartarian Honeysuckle, which is a native of western Siberia and central Asia, is an old inhabitant of gardens and one of the best shrubs for cold countries, for it can support without injury the excessive cold of the long winter and the burning sun of the short summer of the north fatal to all but a few of the plants which decorate the gardens of more temperate regions. It cannot be too often repeated that the Tartarian Honeysuckle and its hybrids are large, fast-growing plants, that they only thrive in rich, well-drained soil, and that they can only show their real beauty when allowed sufficient space for free development of their branches. Twenty-five feet between the plants does not give them too much room. There are many varieties of the Tartarian Honeysuckle in the Arboretum collection varying in color of their flowers and in the color of their fruits.

The varieties of *L. tatarica* which have this year the handsome fruit are the var. *rosea* with scarlet fruit and var. *lutea* with bright yellow fruit. The fruits, however, of some of the hybrids are more beautiful than those of any of the varieties of the species. As fruiting plants the best of these hybrids which are in the Arboretum are *Lonicera bella*, *L. muendeniensis*, *L. notha*, and *L. amoena*. *L. bella* was raised in the Botanic Garden at Petrograd and is believed to be the product of a cross between *L. tatarica* and the

Japanese *L. Morrowii*. There are several varieties of this hybrid differing in the color of their flowers. They are large, free-flowering plants with large, lustrous red fruit. *L. muendeniensis*, which originated in the Botanic Garden at Muenden, is probably of the same parentage as *L. bella* altered by the cross with another species. It is a very vigorous plant with large, lustrous, orange-red fruit. *L. notha*, which is believed to be a hybrid of *L. tatarica* and *L. Ruprechtiana* is another large, vigorous, fast-growing plant with lustrous orange-red fruit. *L. notha* and *L. muendeniensis* as fruit plants are the handsomest of the large-growing Bush Honeysuckles with dark green leaves and orange-red fruits. More beautiful when in flower is the hybrid of *L. tatarica* with the Persian *L. Korolkovii* which is called *L. amoena*. This is a smaller plant than the other hybrids of the Tartarian Honeysuckle with pale gray-green leaves, small pink flowers and small red fruits. When it is in bloom this plant is considered by many persons the most beautiful *Lonicera* in the collection.

The Japanese *L. Morrowii* is more beautiful now when it is covered with its large orange-red fruits than it was when the yellow and white flowers were open in early spring. This is a round-topped shrub, much broader than high, with gray-green foliage, and long lower branches which cling close to the ground. When it can have sufficient room in which to grow this is one of the handsomest of the Honeysuckles and one of the best shrubs introduced into the United States by the Arboretum. There are two hybrids of this species in the collection, *L. minutiflora* with small, translucent, yellow fruit, and *L. muscaviensis* with large bright scarlet fruit. They are large, hardy and fast-growing plants.

Very different are the bright blue fruits of the different geographical

forms of the widely distributed *Lonicera coerulea* which are now ripe. These fruits are beautiful but they are a good deal covered by the leaves, and the plants are not as conspicuous at this season of the year as the Tartarian and several of the other Bush Honeysuckles. The bright red fruit of *Lonicera trichosantha* is conspicuous in the last weeks of July. This is a shrub now three or four feet tall in the Arboretum, with erect stems, large yellow and white flowers, and fruits rather larger than those of the Tartarian Honeysuckle. It is a native of northern and central China and promises to be a useful addition to summer fruiting shrubs. The fruits of two western American Bush Honeysuckles, *L. involucrata* and its varieties and *L. Ledebourii* ripen in July and are handsome and peculiar, for the large, lustrous black berries rise from the much enlarged bractlets of the flowers which are now bright red and much reflexed. One of the most interesting of these plants is the variety *serotina* of *Lonicera involucrata*. This has bright yellow flowers flushed with scarlet which do not open until July; the enlarged bractlets of this Colorado plant are spreading, not reflexed.

The tree with the showiest fruits in the Arboretum in July is the Tartarian Maple (*Acer tartaricum*) which is an early-flowering, very hardy small tree from southeastern Europe and western Asia. The wings of the fruit, which is now fully grown, are bright red and their beauty is heightened by the contrast of the dark green leaves. The female plants of the so-called Mountain Holly (*Nemopanthes mucronata*) are handsome in July when their rose-red berrylike fruits are ripe. *Nemopanthes*, which belongs to the Holly Family, consists of a single species which is common in cool moist woods in the northeastern United States and eastern Canada, and is a wide round-

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topped shrub with erect stems covered with gray bark, thin pale green leaves and inconspicuous flowers. It has taken kindly to cultivation in the Arboretum where there are a number of plants in the Holly Collection in the rear of the Horsechestnut Collection. The snow-white fruits of the red and yellow-flowered forms of the North American *Cornus stolonifera* are now ripe. Very beautiful in winter from the bright coloring of its stems and branches, this Cornel is equally beautiful in July and August when it is covered with its large and abundant clusters of fruit. A garden form of the Old World *Cornus alba* (var. *Rosenthalii*) is fruiting abundantly this year and promises to be a valuable addition to July and August fruiting shrubs.

DECORATIVE BRAMBLES.

Rubus laciniatus, a European plant, which produces long red stems and deeply divided leaflets, is one of the handsomest of the Brambles and is well suited to cover banks or to train over fences and arbors. In England it is valued for its fruit which is described as "one of the finest blackberries in size and flavor." In competition with some of the American

blackberries it will not probably find much favor in this country. There are two double-flowered Brambles in the collection which are also in bloom and which are also important ornamental plants, also well suited to cover arbors and fences. They produce in a season stems from ten to twenty feet long and their white or pink flowers in long, many-flowered crowded clusters resemble miniature Roses. These plants are called *Rufus ulmifolius* var. *bellidiflorus* and *R. thyrsoides flore pleno*, and seem to be little known in the United States.

LAWN MAKING LITERATURE.

Many gardeners seem to be interested in the subject of lawn making. The following publications treat the subject at length:

L. H. Pammel, J. B. Weems, and F. Lamsen-Scribner, Iowa Sta. Bul. 56 pp. 385-621.

Twelfth Annual Report of Oklahoma Sta. 1903.

L. C. Corbett. The Lawn. U. S. D. A. Farmers' Bul. 248.

L. Barron. Lawns and How to Make Them. Doubleday Page & Co., 1906. New York.

C. C. Newman. Permanent Lawns for the South. S. C. Sta. Bul. 157.

INDIGOFERAS IN BLOOM.

Five species of *Indigofera* of the pea family are now blooming in the Arnold Arboretum. They are small plants with handsome flowers in terminal racemes, well suited to decorate a garden border. The three species with pink flowers, *I. Kirilowii*, a native of northern China, Manchuria and Korea, *I. Potaninii* and *I. amblyantha* are perfectly hardy and the last will continue to open its small flowers on the lengthening racemes until October. The other species, *I. Gerardiana* and *I. decora*, are killed to the ground every winter, but like herbaceous plants produce new stems in the spring which never fail to flower during the summer. *I. decora* is a native of southern China, and in the Arboretum the flowers are pure white. *I. Gerardiana*, which is a native of the northwestern Himalayas, has gray-green foliage and rose-purple flowers. This is the least beautiful of the five species now growing in the Arboretum. The collection still needs *I. hebeptala*, another Himalayan plant which is rarely seen in English gardens. It has red flowers, in elongated racemes, and, judging by the picture of it which has been published is a handsome plant. This and another



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red-flowered Himalayan species, *I. atropurpurea*, are desired by the Arboretum.

OLD-WORLD ASH TREES.

Fraxinus oregona, the Pacific coast Ash-tree, is a large and handsome tree and one of the few valuable deciduous-leaved timber trees of the northwest. It has proved hardy in the Arboretum where it grows well but where it will probably never become a large tree.

Of the Old-World Ash-trees the best known is *Fraxinus excelsior*, one of the important timber trees of the world, and as it grows in western and central Europe often a magnificent tree sometimes nearly one hundred and fifty feet high with a tall massive trunk three or four feet in diameter. A number of abnormal forms of this tree have appeared in European nurseries and plantations, but *F. excelsior* and its varieties are miserable trees in New England and should not be planted here. *Fraxinus rotundifolia* and its variety with pendulous branches are established in the Arboretum. They are small trees, natives of southern Europe and southwestern Asia, and although interesting from the botanists' point of view add little to the beauty of a collection of trees.

An Ash-tree from Turkestan and Songaria (*F. potamophylla*) was raised at the Arboretum in 1878 and has grown rapidly into a handsome, shapely and hardy tree. As an ornamental tree this is the most promising of the exotic Ashes which have been planted in the Arboretum. The great Ash-tree of northeastern Asia, *Fraxinus mandshurica*, inhabits eastern Siberia, Manchuria, Korea, and northern Japan. It is a really splendid tree and produces wood of exceptionally good quality. This tree was first raised in the Arboretum in 1878. It is hardy and grows well for a few years but soon begins to fail and become unsightly, and no place has yet been found in the Arboretum which suits it.

Ash-trees require deep, rich, moist soil and as they usually unfold their leaves late and lose them early in the autumn they are not good trees to plant to shade streets and sidewalks. They are often injured while young by borers, and they are all liable to suffer from the attacks of the oyster shell scale.

INSECT HELPS CONTROL OTHER INSECTS.

A European parasitic fly that may become of far-reaching importance in

the control of the gipsy moth and brown-tail moth and certain other serious pests of similar character is being multiplied from importations of this new insect enemy. A report of the work with the parasite—known as *Compsilura concinnata*—has just been made by entomologists of the United States Department of Agriculture.

This report shows that this parasite has reduced the damage done by the gipsy moth and the brown-tail moth in the New England States, where they were so abundant and destructive that they ate the leaves off enormous areas of forest and shade trees every year. It has been found that *Compsilura* also aids in the control of other insect pests.

The white-marked tussock moth, a serious pest in the New England States a few years ago, has practically disappeared since *Compsilura* has become established. The cabbage worm, still a serious pest, has been lessened in some sections. Celery worms are not as common as formerly, and the fall webworm is scarcely noticed in the Northeastern States now.

The entomologists do not claim that this parasite is the sole cause of this reduction, but it has proved an important natural enemy to all of them.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

I have a letter from Philadelphia saying that rose enthusiasts there have been interested in my remarks in the issue of July 12 about climbing roses. It is stated that three of the varieties which I mentioned, namely, Dr. Van Fleet, American Pillar and Excelsa, have been honored by the Pennock double star. I understand Mr. Pennock thinks, however, that Bess Lovett is better than the climbing American Beauty, and prefers to give it the double star in that connection. As to the fifth rose in the double star list of five, he still sticks to Paul's Scarlet Climber. I am told that Mr. Pennock also emphasizes the fact that Elizabeth Ziegler is not the same color as Dorothy Perkins, which fact is quite true. I do not think that I would put Elizabeth Ziegler in a star list of five, myself, but I should be tempted to include either Silver Moon or Purity, perhaps the former because of its hardness.

Mr. Watson has been telling me that there is real foundation for my prophecy that the time is coming when there will be a class of perpetual flowering climbers. He says, in fact, that Dr. Van Fleet, who is one of the most disreputable among the

hybridizers, as everybody knows, already has several new seedlings which show the ever-blooming characteristics to a marked degree. George C. Thomas, Jr., is also working along the same lines. The development of their continuous flowering plants will be watched with eager interest. Nothing in the way of rose novelties will be more warmly welcomed, I am sure, by the general public.

The great value of the climbers for many purposes is being appreciated as never before, and the growing of climbers in great variety is coming to be a hobby with men who are fond of garden work.

I never remember having seen Anthemis used so freely in gardens as this season. Perhaps that is because I haven't happened to visit gardens where it was in favor in past years, or because I haven't given it particular attention. It is, to be sure, an unassuming plant, a single blossom making only a poor show. A mass of these flowers, though, becomes most effective wherever there is a place for yellow. There is one thing to say for this hardy marguerite, which is: that it will grow in almost any kind of soil,

and that it will bloom continuously and with lavish profusion from June up to late summer. These plants like a sunny location, although they will bloom in partial shade. They are easily grown from seed, or by root division. Perhaps *A. tinctoria* is best for gardens because it has a particularly long flowering season. They are charming additions to a mixed border. A late sulphur variety is called *A. tinctoria pallida*. This is the name of the variety illustrated, the picture having been made by Mr. Richard Rothe, of Glenside, Pa., who has much to say about the value of the species and varieties mentioned, as well as other forms which are more dwarf in habit, and excellent for rock work, in which Mr. Rothe specializes.

I am interested to see that a writer in the Journal of the International Garden Club also dwells upon the value of the *cimicifuga* for garden work. This writer, Mr. A. Martini, points out that they are excellent for naturalizing and can be transplanted with ease even in well advanced stages of growth. He speaks of *C. dahurica* as being particularly decorative, having drooping feathery racemes of small creamy white flowers. This is a *cimicifuga* which comes from Asia, and blooms a little earlier than the American representative, *C. racemosa*.

C. racemosa is sometimes called snakeroot or



Anthemis tinctoria pallida

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St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 24
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4226-26
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
son Co.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—Randall's Flower Shop
22 Pearl St.

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We cover all Michigan points and good
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FLOWERS The Best at
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the F. T. D. must be accompanied by
remittance.

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At your service to deliver Flowers
or Designs on Order by Tele-
graph or otherwise. Prompt
Reliable Service.

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Nothing Better

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Everything in Flowers

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E. P. NEIMAN, Secretary.

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COTTAGE GARDENS NURSERIES' TROUBLES.

G. Vandeen Abeele, receiver of the
Cottage Gardens Nurseries at Eureka,
Cal., has sent out the following notice:

Unless some relief comes immediate-
ly we will lose practically all our
young stock on hand. With the excep-
tion of a handful of men the crew has
been on a three weeks' strike. No
work is being done on the Bulb
Farm and only a little watering is
done at the Eden plant. The orders
are piling up in the office and I am
unable to get ready to deliver them.
Already \$28,000 worth of orders have
been accepted and I am positive to
reach the \$100,000 mark.

As I have stated on my former state-
ments only \$20,000.00 is needed to save
the situation and to guarantee the
creditors dollar for dollar on their
claims. The local merchants have sub-
scribed for \$7,500.00 but it cannot be
used unless the full amount is sub-
scribed.

It seems ridiculous that with assets
of over \$300,000.00 I have been unable
to sell the certificates which were
ordered by the Superior Court of Hum-
boldt County and which constitute a
first lien upon the crops.

It seems to me that with two hun-
dred creditors and stockholders that
they should at least co-operate and be
able to raise that small amount which
is all that is necessary to protect them-
selves.

Unless some action is taken there is
only one way left for me to follow and
that is to ask for my release as Re-
ceiver and after that I cannot vouch
for the outcome.

I cannot keep on this way and work
without funds and see the stock starve
on my hands as the losses since the
strike are already over \$100,000 a day.

CLEVELAND

A. GRAHAM & SON

5523 Euclid Ave.

Will take good care of your orders

Members of F. T. D. Association.

DAVID CLARKE'S SONS

Deliver orders from any part of the country to

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Write or Telegraph

2139-2141 Broadway, - New York

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Telephone, Murray Hill 783

Out-of-town Orders Solicited. Location
Central. Personal Attention.

Member F. T. D. Asso.

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FRED C. WEBER

4326-28 Olive St.

Member Florists Telegraph Delivery Association

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THE J. M. GASSER COMPANY,

CLEVELAND

Euclid Avenue

The Far-Famed Flowers of

TORONTO

Delivered on mail or telegraph order for
any occasion, in any part of the Dominion.

JOHN H. DUNLOP

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 Unknown customers kindly give refer-
 ence or cash with order

CUT FLOWER BOXES
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 We are Wholesale Florists Doing
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184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers
ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

**IF You Want Anything from Boston Get It
 From Henry M. Robinson & Co.**

For Safety Place Your Orders With Us

HENRY M. ROBINSON & CO.
 2 Winthrop Square and 32 Otis Street, BOSTON, MASS.

CYCLAMENS FOR THE HOLIDAYS.

Cyclamens for Thanksgiving and Christmas trade must not be neglected now. Care must be taken not to allow them to get hard or pot-bound, and crowding should be avoided. Each bright day the plants should be sprayed, and once a week a nicotine solution should be used to ward off attacks of mite, thrips and aphids. The house should be well ventilated and movable shades should be used so that the plants will not become drawn. An ideal place for them is the greenhouse bench, where the plants can be protected from hot sun. Just as good plants can be grown here as in cold frames if the pots can be plunged, although the latter always seem a little stockier. For the last potting use a soil consisting of two parts fibrous loam, one part dried cow manure and one part flaky leaf mold, not too much decayed, adding a generous dash of sharp sand and some fine charcoal. They should have good drainage.

BEGONIAS AND PRIMROSES.

Begonias and primulas will not do well in a house or frame where the temperature is nearly 100 and the atmosphere dry. The doors and ventilators must be opened and a light shading applied. Use the hose frequently to help maintain as low a temperature as possible, but do not soak the plants or keep them standing in water. The plants should be lightly sprayed. The hose should be used frequently in the palm house also. The walks may be wet down if you do not wish to wet the ferns too much. When the thermometer registers 90 or more the chrysanthemums should have frequent syringings, not applied so as to wet the

bench every time, but to wet the foliage so that the plants may more easily withstand the heat. Spraying the walks and below the benches will create a moist atmosphere.

LET US CAPITALIZE THE DULL PERIOD.

It has often been said that it isn't the big idea that counts as much as it is to put it over, and we have about hit the suggestion.

We have all admitted that our Publicity Campaign is a good one and that we have shown results, but our \$100,000 appropriation is necessary before we can "put over" that which we hope to do.

If we expect to sell flowers to the public we must also sell the advertising campaign to the florists and there must be no half-heartedness to carry on. Nothing but 100 per cent. confidence and the full amount asked for will suffice to evidence the fact that we too believe in our own future.

They say that an optimist is one who lends money, but we can change this slightly by proving that an optimist is one who sends his subscription to a campaign when it is lagging now, not this fall when everybody will be doing it again. Send yours now, we must continue our campaign through the summer although somewhat modified.

Why not keep the business going summers? It can be done if you just push a bit harder. Don't lay back and say there is nothing doing. Be up and about and create something. It can be done, but it is up to you.

HENRY PENN,
 Chairman National Publicity
 Campaign.

H. E. FROMENT
Wholesale Commission Florist
Choice Cut Flowers
New Address, 143 West 26th St., NEW YORK
Telephones: 2390, 3261, Madison Square.

WM. P. FORD
Wholesale Florist
107 W. 26th Street, NEW YORK
Telephone 5335, Farragut.
Call and inspect the Best Establishment
in the Wholesale Flower District.

WALTER F. SHERIDAN
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CHOICE CUT FLOWERS
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WHOLESALE FLORIST
109 WEST 26th ST
CONSIGNMENTS SOLICITED
PHONE 606 FARRAGUT NEW YORK
609

E. G. HILL CO.
Wholesale Florists
RICHMOND, IND.
Please mention Horticulture when writing.

REED & KELLER
122 West 25th St., New York
Florists' Supplies
We manufacture all our
Metal Designs, Baskets, Wire Work & Novelties
and are dealers in
Decorative Glassware, Growers and
Florists' Requisites

THE KERVAN CO
Fresh Cut Decorative Evergreens.
Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
Catalog of Greens and Florists' Supplies
119 W. 26th St., - NEW YORK

WILLIAM H. KUEBLER
Brooklyn's Foremost and Best
WHOLESALE COMMISSION HOUSE
* First Class Market for all CUT FLOWERS
* Willoughby St., Brooklyn, N. Y.

WE WANT MORE SHIPPERS
We have a numerous clientele of New
York City buyers and the demand exceeds
our supply. This is especially true of
Roses. We have every facility and abund-
ant means and best returns are assured
for stock consigned to us.

Address Your Shipments to
UNITED CUT FLOWER CO., INC.
111 W. 28th St., New York
D. J. Pappas, Pres.

HENRY M. ROBINSON CO. OF NEW YORK
WHOLESALE FLORISTS
55-57 West 26th Street
Telephones. 12-3510 Madison Square
MAURICE L. GLASS, Treasurer
Consignments Solicited

B. A. SNYDER CO. Wholesale
Florists...
Hardy Cut Evergreens, Cut Flowers and Florists Supplies
21-25 Otis Street, BOSTON, MASS.
Telephone Fort Hill 1083-1084-1085

WILLIAM F. KASTING Co.
Wholesale Florists
508-570 WASHINGTON STREET - BUFFALO, N. Y.

New England Florist Supply Co.
276 Devonshire Street, BOSTON, MASS.
Telephones, Fort Hill, 3469 and 3135

COMING EXHIBITIONS.

Will secretaries please supply any
omissions from this list and correct
dates that have been altered:

August 9-10, Boston, Mass.—Exhibi-
tion of gladioli and phlox by Massa-
chusetts Horticultural Society. Wm.
P. Rich, secretary, Horticultural Hall,
Boston.

September 4-6, San Francisco, Cal.—
Annual show of the Dahlia Society of
California at Palace Hotel. F. C.
Burns, secretary, San Rafael.

September 9-11, Hartford, Conn.—
Fall flower show of the Connecticut
Horticultural Society. Alfred Dixon,
secretary, Wethersfield, Conn.

September 11-14, Boston, Mass.—
Dahlia, fruit and vegetable exhibition
of the Massachusetts Horticultural So-
ciety. Wm. P. Rich, secretary, Horti-
cultural Hall, Boston.

September 18-19, Providence, R. I.—
Dahlia show of the Rhode Island Hor-
ticultural Society. E. K. Thomas, sec-
retary, Kingston, R. I.

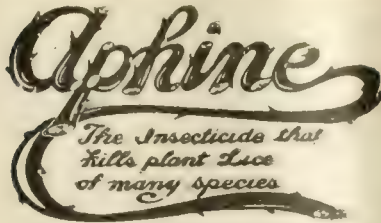
September 23-25, New York—Dahlia
exhibition under the auspices of the
American Institute of the City of New
York and the American Dahlia Society
at the Engineering Society building,
25-33 West 39th street. Wm. A. Engle-
son, secretary board of managers, 322
West 23rd street, New York.

FLORISTS' BIG CUCUMBERS.

M. Huberman of 171 Belmont street,
a well-known local florist, has devel-
oped a grade of cucumbers which aver-
age 18 inches in length and some of
which measure as much as 24 inches.
Yesterday Mr. Huberman picked 16 of
them and the shortest was 17 inches
long. He has named them "The Giant"
and is now working to increase its size
to a full yard and has great hope of
success before the season is over. The
seed originally came from Scotland,
and although it produced fruit larger
than the average cucumber, it re-
mained for Mr. Huberman to produce
the cucumbers in unusual sizes.—*Bos-
ton Globe.*

SCHIZOPHRAGMA HYDRANGE- OIDES.

Schizophragma hydrangeoides must
be included among the shrubs which
flower in July. This beautiful climb-
ing plant has not had a successful
career in the Arnold Arboretum.
Seeds were first sent here in Decem-
ber, 1876, from Sapporo in northern
Japan with those of Hydrangea petio-
laris, Syringa japonica, Phellodendron
sachalinense and other interesting
plants. A large number of Schizo-
phragma plants were raised and sent
to other American and European gar-
dens. Those planted in the Arbore-
tum never flourished, and soon disap-
peared, probably because the right
place was not found for them. Plants



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.

Quart, \$1.00; Gallon, \$2.50.

FUNGICINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.

Quart, \$1.00; Gallon, \$2.50.

VERMINE

For eel worms, angle worms and other worms working in the soil.

Quart, \$1.00; Gallon, \$3.00.

SOLD BY DEALERS.

Aphine Manufacturing Co.
MADISON, N. J.

USE WIZARD BRAND
CONCENTRATED PULVERIZED MANURE

Pulverized or Shredded
Cattle Manure
Pulverized
Sheep Manure

The Florists' standard of uniform high quality for over ten years.
Specify: **WIZARD BRAND** in your Supply House order, or write us direct for prices and freight rates.
THE PULVERIZED MANURE CO.
24 Union Stock Yard, Chicago



Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to direction, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

½ Pint, 80c.; Pint, 50c.; Quart, 90c.;
½ Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00.
Directions on package.

LEMON OIL COMPANY

Dept. S. 420 W. Lexington St., Baltimore, Md.

WHO IS WINNING THE FIGHT — YOU OR YOUR PLANT ENEMIES?

Kill the Plant Lice and Parasitic Fungi Spores on Trees, Shrubs, Flowering Plants, Vegetables, Palms, Bay Trees, Exotic Plants, Etc., Poultry, Animals, Etc.

SULCO-V.B. WILL DO IT

SULPHUR-FISHOIL-CARBOLIC-COMPOUND

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BOSTON OFFICE 141 MILK STREET, GEORGE H. FRAZIER, Manager.

*Live Longer, Live Better - Eat More Fruit and Vegetables
Say It With Flowers*

CYPRESS GREENHOUSE STOCK

PECKY CYPRESS STOCK

HOT BED SASH

Ask for Circular D and Prices

THE A. T. STEARNS LUMBER COMPANY

NEPONSET, BOSTON

DREER'S "Riverton Special" Plant Tub



No.	Diam.	Ea.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton Tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER, Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.

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NEW YORK



World's Oldest and Largest
Manufacturers of

FLOWER POTS

WHY?

A. H. HEWS & CO., INC.

Cambridge, Mass.

Dreer's Peerless Glazing Points For Greenhouses

Drive easy and true, because both bevels are on the same side. Can't twist and break the glass in driving. Galvanized and will not rust. No rights or lefts. The Peerless Glazing Point is patented. No others like it. Order from your dealer or direct from us.

1000, 90c. postpaid.
Samples free.
HENRY A. DREER,
714 Chestnut Street,
Philadelphia.

FULL
SIZE
No. 2

When Writing to Advertisers Please Mention Horticulture

(Continued from page 93)

ship list. Under the postal laws, mailing under the second class privilege is forbidden to any member in arrears, consequently copies to such are mailed at full rates, therefore to be sure of receiving the publication regularly members should see to it that they are in good standing on the Society's books, and that their 1919 dues and arrearages, if any, are paid.

Exhibitors desiring signs, desks, etc., should write the secretary at once, in order that their requirements may be met in good time. The following exhibitors are in addition to those previously announced:

W. F. Kasting Co., Buffalo, N. Y.
 Julius Roehrs Co., Rutherford, N. J.
 C. S. Ford, Philadelphia, Pa.
 Morehead Mfg. Co., Detroit, Mich.
 The Greening Nursery Co., Monroe, Mich.
 W. W. Barnard Co., Chicago, Ill.
 The Florists' Exchange, New York, N. Y.
 Raedlein Basket Co., Chicago, Ill.
 The Proto-Feed & Guano Co., Chicago, Ill.
 Chicago Printed String Co., Chicago, Ill.
 Spokane Concrete Flower Pot Machine Co., Spokane, Wash.
 Carl Hagenburger, West Mentor, O.
 Climax Mfg. Co., Castorland, N. Y.
 C. C. Pollworth, Milwaukee, Wis.
 J. C. Moninger Co., Chicago, Ill.
 If other prospective exhibitors close negotiations within the next few days, the exhibition space available will all be taken up prior to the week of the convention.

National Publicity Campaign.

Another week and the contributions to the Publicity Campaign Fund exceed \$1,000. While this is improvement maintained it is far from expectancy fulfilled. A total of \$1,000 a week will not approximate \$100,000 in a year, nothing like it. Nobody likes to be put on half rations, but that is what it will amount to if we do not meet the quota set up by our committee and our Executive Board—we shall only get half of the benefit while the whole is in sight.

The complete list of subscriptions published early in July in this paper shows more disparity in the totals for some of the states. The chairman of the local committee for the state of Virginia is, in a vigorous letter, calling the attention of the florists in his state to the very small showing they have so far made as contributors to the Fund. The neighbor state, West Virginia, with little more than half the population makes a much better showing, but neither are anywhere

near the figures expected of them. The local chairmen of all the states are urged to do their utmost to increase their state totals. The national publicity is distributed equally among the states in proportion to population; in fact, it could not be otherwise.

The eyes of the many hundreds of subscribers to the Fund are weekly turned to the subscription list published in these columns, with the expectancy of seeing the names of tardy would-be contributors known to have not yet "come across." The subscription list is now recognized as a "Roll of Honor" in every sense of the term. That which is worth having is worth paying for. The "venture" stage of campaign is a long way behind us, we are now paying for results which we are absolutely sure of getting. Look upon your contribution, if you like, as a sort of return treat to your brother florists who have treated you to the benefits of the campaign already resultant. We are assuming, of course, Mr. Reader, that you are still merely on the list of prospectives. The fall season will soon be here, with a wealth of material to move. No matter whether you are a grower or retailer, the more active the movement of stock, the greater your opportunity to make your business profitable. Demand governs the situation, and, as you know, it is the purpose of the Publicity Campaign to stimulate and increase it. So far, we have been able to do this, so let us continue the good work. Your committee must make their contracts for space in the national magazines many weeks in advance of publication. Help them to make really worth while arrangements by sending in your contribution at once.

New Subscriptions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

H. Bayersdorfer & Co., Philadelphia, Pa. (1 yr.)	\$100.00
G. S. Ramsburg, Somersworth, N. H. (1 yr.)	10.00
Donnelly Floral Co., Wichita Falls, Tex. (1 yr.)	25.00
Archias Floral Co., Sedalia, Mo. (1 yr.)	10.00
Leopold Mallast, Mt. Clemens, Mich. (1 yr.)	10.00
Jas. W. Riggs & Co., Three Rivers, Mich. (1 yr.)	5.00
Aug. L. Kroner, Quincy, Ill.	5.00
Griffens Flower Shop, Hannibal, Mo.	10.00
Jos. Heintz & Sons, Jacksonville, Ill.	5.00
Harry Hofmann Floral Co., Jacksonville, Ill.	10.00
Gentemann Bros., Quincy, Ill. (add'l)	10.00
F. Wm. Beckenkamp, Jr., Quincy, Ill.	20.00
Thos. Franks & Son, Champaign, Ill.	10.00

Frank B. Smith Sons, Douville, Ill.	10.00
Floral Art Studio, Oswego, N. Y. (1 yr.)	15.00
Sunnyside Floral Nursery, Fayetteville, N. C.	15.00
L. Wassermann, Muskegon, Mich.	5.00
Hoffman, Inc., Boston, Mass.	25.00
R. T. Broderick, Yonkers, N. Y.	10.00
H. E. Wilson, Rochester, N. Y. (1 yr.)	10.00
L. D. Robinson, Springfield, Mass.	10.00
S. S. Skidelsky & Co., New York, N. Y. (1 yr.)	25.00
Metairie Ridge Nursery Co., New Orleans, La. (1 yr.)	35.00
Arthur J. Bailey, Glens Falls, N. Y.	5.00
Valentine Burgevin, Inc., Kingston, N. Y.	25.00
Henry Rudolph, Essex Falls, N. Y. (1 yr.)	5.00
J. A. Topscott, Owensboro, Ky. (1 yr.)	5.00
The Schafer Estate, Ballston Spa, N. Y. (1 yr.)	5.00
M. P. Ruane, Waltham, Mass.	15.00
Janiten & Kunan, Arlington, Mass.	25.00
G. W. Mercer, Cleveland, O. (1 yr.)	20.00
John Kurst, Grand Rapids, Mich.	10.00
Alfred Hannab & Son, Grand Rapids, Mich.	10.00
L. Buins Slot, Grand Rapids, Mich.	5.00
Henry Smith, Grand Rapids, Mich.	25.00
Fryling & Mendels, Grand Rapids, Mich.	25.00
H. W. Allersma, Grand Rapids, Mich.	5.00
Eli Cross, Grand Rapids, Mich. (add'l)	10.00
Arthur Crabb, Grand Rapids, Mich.	10.00
Phillips Bros., Newark, N. J.	10.00
C. A. Kuehn, St. Louis, Mo. (1 yr.)	50.00
J. E. Jackson, Gainesville, Ga.	5.00
J. M. Keller Co., Whitestone, L. I. (1 yr.)	100.00
Paul A. Timm, Toledo, O.	5.00
Springfield Floral Co., Springfield, N. J.	10.00
The Soo Greenhouses, Sault Ste. Marie, Mich. (1 yr.)	5.00
Alex R. Weissgerber, Chicago, Ill.	10.00
W. E. Gravett, Lancaster, O.	5.00
L. L. Boysen, Pensacola, Fla.	5.00
Wm. Swinbank, Sycamore, Ill. (1 yr.)	5.00
American Peony Society, Chester, Pa. (1 yr.)	100.00
C. P. Dieterich & Bro., Maysville, Ky.	10.00
Frank S. Miller, Columbus, O.	10.00
Gilbert H. Wild, Sarcoxie, Mo. (1 yr.)	5.00
Mrs. S. S. Strong, Lake Charles, La.	5.00
C. Peterson & Sons, Escanaba, Mich. (1 yr.)	5.00
G. VanBocheve & Bro., Kalamazoo, Mich. (add'l)	50.00
Samuel Batson, Kalamazoo, Mich. (1 yr.)	10.00
The Flower Shop, Battle Creek, Mich.	10.00
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Jos. Gansbiller, Charlotte, Mich.	10.00
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Alfred S. Lee, Bedford, O.	5.00
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Pinchurst Floral Co., Pleasant Hill, Mo. (1 yr.)	10.00
Wm. W. Allabough, Silverdale, Pa.	5.00
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Fredrick Marquardt, Brooklyn, N. Y.	10.00
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A LIVE SOCIETY.

I have been much impressed with the excellence of the little magazine being put out by the Minnesota State Horticultural Society each month. It is called the Minnesota Horticulturist, and is made up largely of the papers read at meetings of that society, but considerable additional matter of timely interest is added and numerous illustrations set off the text. The Minnesota Society is the largest of the kind in the country, and seems to have been one of the most successful in engaging the interest of all classes of people concerned at all with horticultural matters. Its members include both amateurs and professional growers, and the programs for the different meetings cover a wide range of subjects, although particular emphasis is laid on fruit growing, efforts being made so far as possible, apparently, to get reports from men and women who

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HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laello Cattleyas our specialty. One trial order solicited.

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Peonies. The world's greatest collection. 1200 sorts. Send for list. **C. BETSCHER, Canal Dover, O.**

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FOR SALE: Two greenhouses, 100 x 25; 1 east and west, 1 north and south connected, 16x24 Belgium glass, with or without 4 acres land, or will divide it. Big chance for man and wife. **TIRRELL, 105 Randolph, Mass.**

have been particularly successful in any special line. The success of this society is particularly important and it is stated that the membership fee is only \$1.00, which pays for the magazine mentioned for a year as well as extending all the privileges of the society. There is also a life membership fee of \$10.00.

No doubt conditions in Minnesota have been especially favorable to the building up of a society of this kind, but certainly the enthusiasm must be considerable to build up so large a membership at the low rate mentioned as to create a surplus in funds for a large investment in liberty bonds.

PHILADELPHIA.

The Florists Club has issued a timetable for the convention at Detroit, August 18-21. It has not been thought advisable to have a Philadelphia party, and no transportation committee has been appointed. Everybody to go as they please, according to Secretary Kift's circular.

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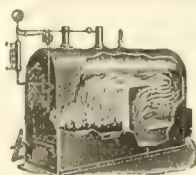
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CHICAGO**

Principles and Practice of Pruning

By M. G. KAINS

Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

After a few pages of introduction the author discusses Plant Physiology as related to pruning. A chapter takes up the Philosophy of Pruning, itself a very interesting subject. Then follows a classification and clear discussion of Buds, very fully illustrated from life. How Wounds Heal is an exceedingly interesting chapter, as are also those on Prevention and Repair of Mechanical Injuries, Pruning Nursery Stock, Young Trees, Mature Trees and Odd Methods of Pruning and Training, Rejuvenating Neglected Trees and Practical Tree Surgery.

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HORTICULTURE PUBLISHING CO.
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Plant Propagation, Greenhouse and Nursery Practice

By M. G. KAINS

We have had many inquiries from time to time for a reliable and up-to-date book on plant propagation, but were always at a loss to find any publication that we could recommend. The subject has been dealt with in fragmentary manner only in books that have come to our notice. So it is well that this new work has been issued, especially as it is both comprehensive and practical, and it should meet with a ready sale among plantsmen, nurserymen and gardeners. There are nineteen chapters covering in detail topics of germination and longevity of seeds, propagating by buds, layering, cuttings, grafting, etc., fruit tree stocks, scions, etc., and there are eight pages of condensed cultural instructions in tabulated form, covering annuals and perennials from seed, woody plants, evergreens, vines, bulbs and tubers, greenhouse and house plants, ferns, palms, water plants, orchids and cacti. The illustrations are numerous, comprising 213 figures and halftone plates. There are 322 pages well bound and on heavy paper, teeming with helpful information. It is a book which no cultivator can afford to do without. It is worth many times its price. Copies can be supplied from the office of HORTICULTURE at publisher's price, \$1.50.

HORTICULTURE PUBLISHING CO.
147 Summer St., Boston, Mass.

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HORTICULTURE

Vol. XXX

AUGUST 9, 1919

No. 6

ROSES

OWN ROOT, 3-INCH, \$15.00 PER 100
\$140.00 PER 1,000

- 2000 CECILE BRUNNER
- 1200 HADLEY
- 1000 COLETTE MARTINET
- 4000 WHITE KILLARNEY
- 2000 DBL. WHITE KILLARNEY
- 2200 KILLARNEY BRILLIANT
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Not only a good winter forcing trio, but splendid summer quality, by far the best roses coming in now.
\$6.00, \$8.00, \$10.00,
\$15.00, \$20.00, \$25.00
per 100.

GLADIOLI, \$4.00, \$6.00,
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We still have left about three thousand **ROSALIND** (Glorified *Ophelia*.) This is much darker than the original *Ophelia*. Buds are bright coral, which changes to a clear pink when flowers are developed. One of our best sellers. Extra fine plants, 3½-inch pots, \$30.00 per 100.

We can supply, also, the following varieties in more or less limited quantities as long as unsold, strong plants from 3½-inch pots:

COLUMBIA and MRS. CHARLES RUSSELL.....	100
SILVIA (Yellow <i>Ophelia</i>).....	\$40.00
FRANCIS SCOTT KEY, KILLARNEY BRILLIANT, HOOSIER BEAUTY, and MIGNON, or CECILE BRUNNER	30.00
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We have a splendid lot of ferns for immediate shipment, in the following varieties and sizes:

Nephrolepis elegantissima, Elegantissima Compacta, Muscosa and Superbissima, 3½-inch pots.....	.35 each
Dwarf Boston, 3½-inch pots.....	.25 each
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Muscosa and Smithii, 5-inch pots.....	.75 each
Smithii, 6-inch pots.....	1.00 each
Elegantissima compacta, 8-inch pots.....	2.00 each
Elegantissima, and Elegantissima compacta, 10-inch pots.....	4.00 each
Harrisii, 8-inch pots.....	2.00 each
Dwarf Boston, 8-inch pots.....	1.50 each

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FOR JULY AND AUGUST FLOWERING

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Geraniums

We have booked a large number of orders for next season and will only accept orders for about 100,000 more at the present price of \$25.00 per 1000 for 2-in. After October 1st the price will be \$27.50 per 1000.

We have some fine singles among our collection which are splendid for Winter and early spring blooming.

Alyssum, Giant double; Heliotrope, Lantanas assorted; English Ivy, Swainsona white, ready for immediate shipment at \$2.50 per 100, \$22.50 per 1000.

Hardy English Ivy
Extra strong 3-in. \$3.50 per 100

FERNS.

Boston and Scottii 5-in. pot grown \$4.80 per doz., \$35.00 per 100, shipped without pots.

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on Yearly OrderIt would keep your name and your specialty before the whole trade.
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Seeds, Bulbs, Plants
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Write for our Illustrated Catalog**W. E. MARSHALL & CO.**
SEEDS, PLANTS AND BULBS
Horticultural Sundries**166 W. 23rd St., NEW YORK****GARDEN SEED**

BEET, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

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Send us a list of your requirements in FRENCH and HOLLAND BULBS also PERENNIALS, for special prices.

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NEW YORK CITY**KELWAY & SON****SPECIALIZE IN****SEEDS**

(personally selected strains)

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Only Address, LANGPORT, Eng.**FREESIA PURITY****IMPROVED**

Per 1000

¾ to ½ inch..... \$6.00

½ to ¾ inch..... 9.50

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Burpee's Seeds
PHILADELPHIA**BLUE LIST OF WHOLESALE PRICES**
MAILED ONLY TO THOSE WHO PLANT
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Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium.

Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

When writing to Advertisers kindly mention Horticulture

THE CANDID OPINION OF A RETAIL SALESMAN.

There is a suggestion for florists in a window which I saw in a New England city not long ago. The particular window happened to be in a shoe store, but the arrangement was one which might be adopted in a flower shop equally well. In fact, the impression probably would be greatly enhanced if it were filled with flowers.

There was simply an ordinary window with large lights of glass, a hard wood floor and a quarter dome ceiling. The rear of the window, however, and the side walls were made entirely of mirrors. As a result the window seemed to be three times its actual size, and the center of the dome seemed to come just at the middle of the enlarged space. Such a window filled with flowers and potted plants, while perhaps small in itself, would suggest to the eye a lavish and striking display. I know of no other means by which a rather small showing can be magnified to such an extent in the public eye. Moreover, it is possible to create many handsome effects without a great expenditure of time and money, because the treatment facing the rear of the window which would ordinarily be lost is conveyed to the street by means of the mirrors. It seems to me there is a fine opportunity for some one to do some exceptional window work.

More and more is the selling of garden accessories being taken up by retail florists. An advertisement of considerable proportions has been appearing in one of the Boston papers, advertising a long list of these accessories, including bird baths, benches, tables, sundial pedestals, urns and jardinières. Attention is attracted to the advertising by the picture of a large gazing globe on a pedestal, cost complete, \$40. Mr. Carbone of Boston has long featured not only garden accessories but all sorts of articles only remotely related to flowers. Most of the other dealers, though, confine themselves more strictly to the straight garden accessories and they are building up a trade in these articles which helps materially in keeping the shop going at a time of year when the demand for flowers is necessarily light. By a good window display it is possible to attract the attention and eventually the dollars of men and women who had never thought of using gazing globes, bird baths or urns in their gardens until the suggestion was presented to them in this way.

SEE Dreer's Display of Decorative and other Seasonable Stock at the DETROIT CONVENTION

Our representatives will be present and pleased to give any information desired.

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Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time.

Circulars and other information will be mailed on application.

The New York Botanical Garden
Bronx Park NEW YORK CITY

In reaching out for business florists in England have begun the sale of table decorations and other sundries in quite a large way. A recent number of the Florists' Bulletin says:

"Table decorations come within the purview of florists. The semi-circular glass blocks with holes in them for supporting cut flowers; bouquet spray and wreath boxes, ribbon of various tints and widths, in fact the category of articles for sale as distinguished from those required for his own use, might be almost indefinitely prolonged."

It seems that the English dealers are also working hard to build up a trade in fancy pots and bulb bowls, and the same writer says:

"Florists' requirements today are much more comprehensive than formerly, as they include a variety of articles which in former days were

never stocked. When a florist sells a small fern, if he has a stock of fancy china he can almost always sell a fancy pot with the fern, and there are some exquisitely artistic lines suitable for the purpose. The same remark may be applied to large plant pots and bulb bowls."

There is another development of the British trade, however, which may not be accepted quite so freely in this country. In consequence of the scarcity of fresh flowers, florists have been compelled to employ artificial flowers which are being made in England, and waxed so that they will last longer than the usual military flowers. It is stated in the Bulletin that enormous quantities of these goods are being used as substitutes for fresh flowers. Some of them are very close copies of nature, while others are monstrosities. It appears that at one time some of the artificial roses were so perfect that a justifiable outcry was raised as to their being sold as preserved natural roses. This kind of misrepresentation is of course wholly without the pale, but a British writer in discussing this matter holds that any article, properly labeled, that helps to pay rent and other expenses, including the horrible excess profits tax, is entitled to a place on the florists' tables. This is a matter which is likely to bring up considerable discussion in the United States, at least that is my candid opinion.

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	Per 100	Per 1000
BOSTONS 2 1/4 inch	\$6.00	\$50.00
ROOSEVELTS	6.00	50.00
WHITMANI	6.50	55.00
WHITMANI COM- FACTA	6.50	55.00
VERONA	6.50	55.00
TEDDY, JR.	6.50	55.00

Stock all sold until June 1st.

Order either direct or through
S. S. Skidelsky & Co., Sole Agents
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HENRY H. BARROWS, WHITMAN, MASS.

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POINSETTIAS

2 1/4 inch, \$16.00 per 100
\$95.00 per 1,000

EUPHORBIA JACQUINIAE FLORA

2 1/4 inch, \$10.00 per 100
No C. O. D. shipments.
Write for Prices.

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PLANT BROKERS
329 Waverly Oaks Road, Waltham, Mass.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$25.00 per hundred;
6 inch, \$75.00 per hundred.

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VIBURNUM PLICATUM

Also Berberis Thunbergii, Hydrangea
Paniculata, Weigela, Spiraea, etc.
Ask for complete list of
OAK BRAND SHRUBS.

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We are subscribers to the Nurserymen's Fund
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CERTIFIED PUBLIC ACCOUNTANT

Simple methods of correct accounting
especially adapted for florists' use.
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40 STATE STREET . . . BOSTON
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HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers
in America
BOX 415, DUNDEN, ILL.

Primula Malacoides Rohrerii

The best strain of Malacoides on the market. Years of patience have developed it to perfection. The beautiful shades of Rose Pink, Light Lavender and Snow White make it one of the most desirable and profitable plants to grow not only as single plants but for combination work it cannot be excelled.

Pink and Lavender mixed, 2 1/2 in.	100	1000
Pure White, 2 1/2 in.	\$6.00	\$55.00
Malacoides Townsendi, Shell Pink only, 2 1/4 in.	7.00	60.00
	6.00	55.00

PRIMULA OBCONICA—Rosea Gigantea and Grandiflora, Apple Blossom and Kermesina. 2 1/4-in.	7.00	60.00
Eureka. New variety, very fine Chinensis x Obconica. Large flower, extra fine color. 2 1/2-in.	7.50	65.00
Chinensis. 2 1/4-in.	6.00	55.00

C. U. LIGGIT, Office
303 Bulletin Bldg. Philadelphia, Pa.

IBOLIUM The New Hybrid HARDY PRIVET (L. Ixota x Ovalifolium)

TO BE SENT OUT IN THE FALL OF 1919. Introducers of Box-Barberry.

Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.

FREESIA BULBS

Purity (Improved)

	Per 1000
Size 1/2-5/8ths inch (large).....	\$8.50
Size 5/8ths-3/4 inch (mammoth).....	13.50

NOW READY

CALLA LILY BULBS

Size 1 1/2-2 inches, \$9.00 per 100

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If you are in the market for this class of plants we respectfully solicit your inquiries and orders. Special lists on application.

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COAL ASHES AND PLANT DIS- EASES.

Interesting observations have been made by the writer of the value of coal ashes for growing plants free from disease. On old ash heaps were found growing in perfect state dahlias for instance, when in our garden plantings dahlias were a complete failure. The same was noticed of asters and cucurbitae, that simply died under culture from blight diseases but were found on dumping ground ash heaps free from disease. It would seem that a very liberal use of sifted coal ashes to disease bacteria infested ground should prove very beneficial. The roots of pot bound plants will roam much more in ashes if that material is used on greenhouse benches.—Journal of the International Garden Club.

MICHELL'S PANSY SEED

Mitchell's Giant Exhibition Mixed

A giant strain which for size of bloom, heavy texture and varied colors and shades cannot be surpassed. Half tr. pkt., 30c.; tr. pkt., 50c.; 1/4 oz., \$1.25; \$2.00 per 1/4 oz.; per oz., \$7.00.

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Azure Blue	\$0.40	\$2.75
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MICHELL'S SEED HOUSE

518 Market St., Philadelphia

HORTICULTURE

Vol. XXX

AUGUST 9, 1919

No. 6

LETTERS FROM AN OLD TO A YOUNG GARDENER

In your last letter you asked me how the experiments in crossing Wilson's wonderful lily (Regale) had progressed. I will tell you first about the crosses where the Madonna (Candidum) was used as male.

One reason for using the Madonna was the hope of growing a hybrid resembling it but less subject to disease.

Such a lily would be useful for Easter. I am aware that it has been proposed to use the Regale for this purpose, but as we are accustomed to associate this day with a pure white lily, there might be a prejudice to one with a warm tint.

At the time I first made this cross my Regale plants had shown no sign of the common fungus disease of the Candidum, but growing them with the latter, they have since been attacked. I believe we should keep Candidum out of a garden where Regale is growing. Though not immune it remains by far the best light lily for my locality—the White Mountains—where we expect, and generally get, a frost every month in the year, and where in winter the mercury freezes at least once; yet this lily needs no protection.

Even last winter where we had frequent thaws, the bulbs came through well.

A lily that will thrive under those conditions and increase rapidly from side bulbs is a treasure.

In a letter from Horsford last summer, enclosing the pollen of some rare lilies, he stated that the fungus had attacked his seedling Regales, which had perished by the thousand, and said we must now spray our garden flowers as much as the plants in the vegetable garden. As he is an authority on lilies his advice should be followed. One other matter in his letter was interesting. He stated when he wished to use the pollen of a late flowering lily, on one that blossomed early, he kept the pollen until the next season. This was new to me and may be to you.

Though in the crossing of Wilson and Madonna I have obtained no results of scientific value, some of the

plants are of interest in HORTICULTURE. We have many valuable hybrids of most of our garden plants, but in lilies we can count them on the fingers of one hand. They are so rare I do not know whether they will breed true, or must be increased only by bulb multiplication.

The lilies of which I enclose photographs are both hybrids of Regale and Candidum.

Criticism of Wilson's lovely lily illustrates the old saying, "fools step in where angels fear to tread," but if this flower has a fault, it is that the narrow petals do not fill the spaces sufficiently.

In the first photograph, this is not so apparent, as it has eight petals instead of the typical number—six. The petals are in the form of a double cross. This flower might well be chosen as their Totem by hybridizers, for to use a slang expression, we "sure do get the double cross," for out of fifty thousand hybrid seeds of lilies or iris, we may not get a flower superior to those we had.

In the second photograph the petals are reduced to four. The flower is odd, but not lily like.

The reasons why no results were obtained, that threw light on Mendel's propositions as applied to lilies, were probably these:

The seeds which would have produced plants resembling Candidum, may have been feeble, perishing from adverse conditions. The young bulbs of least vigor may have suffered most from moles, who throw out the bulbs by burrowing, and from mice who eat the roots. The young seedlings also suffer from mice, who cut off the stems, which are sweet.

This summer they cut off flowering stalks to reach the flowers, which they eat into, on the spot, or drag to their nests. Nearly every taxonomic species of garden flowers, is a group of elementary species, as shown by DeVries, and the same is true of trees. I have observed this particularly in the white pine. I saw in one day two white pines cut for masts. Each was three

feet in diameter. Both grew on the same mountainside. One had twice as many annual rings as the other.

For many purposes the wood of a rapidly growing pine is valuable. Therefore nurserymen should take advantage of this observation and seek out the most rapidly growing elementary species and sow the seed. This is the method of selection used at Svalof by Nilsson in breeding rye, which has enabled him to accomplish in a few generations what the Huns did imperfectly in a lifetime, owing to working on the wrong theory.

Lilium regale is probably no exception to the rule of individual species within the species, and men like Farquhar who raise this lily from seed almost by the million, should have a good opportunity to isolate the finest of these and breed from them, giving us a super Regale.

In my crosses of Wilson and Madonna, the seedlings all looked like the former in stem and leaf; there was no trace of the Madonna.

When in blossom they could be divided into two classes.

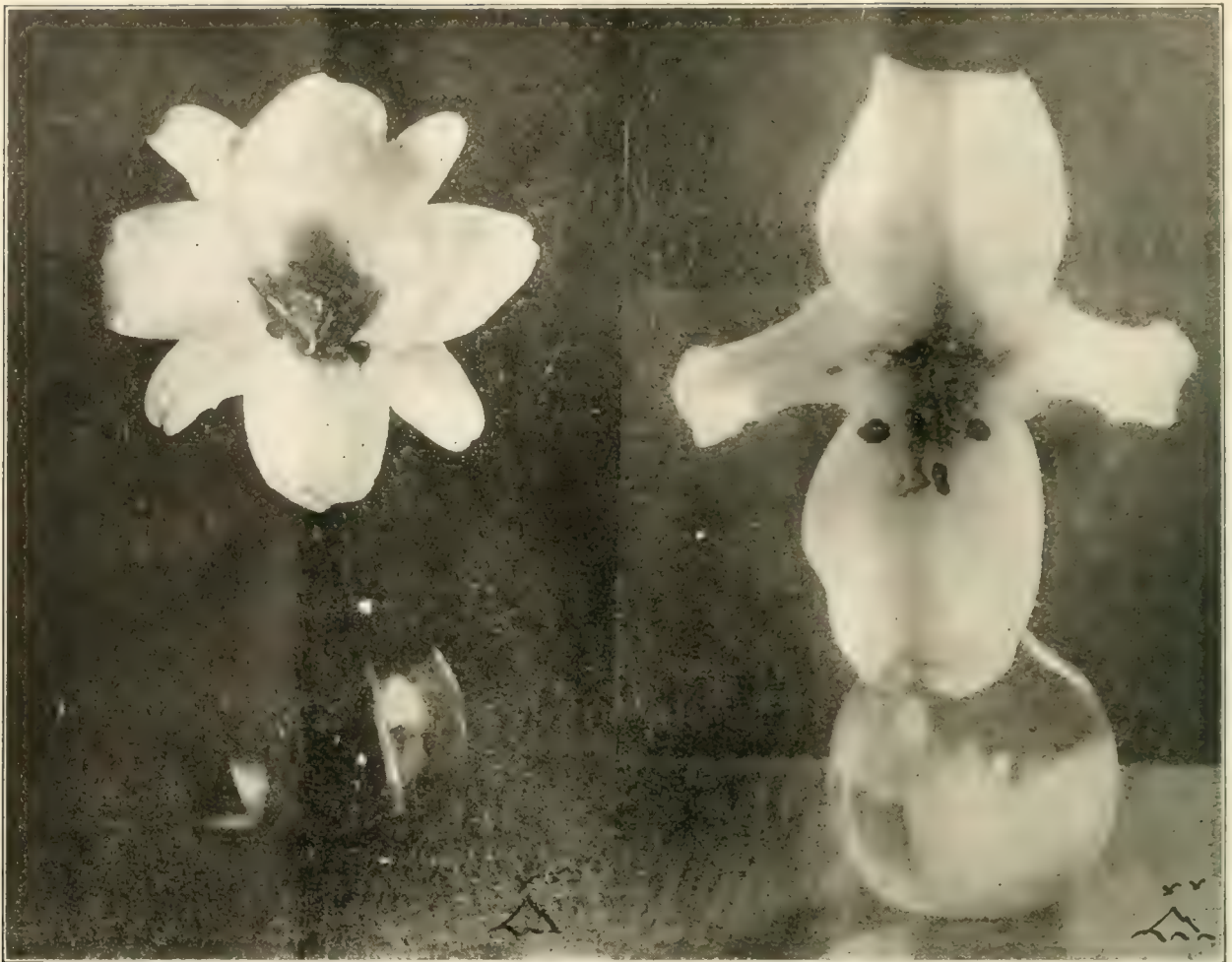
First—Those under thirty inches.

Second—Those between thirty inches and four feet or more.

The first had lost the red color, and were almost white. Their flowers were smaller than Regale, but larger than Candidum. The anthers were much smaller than in Regale.

In the second the flowers were larger than the average Regale, and the plants were taller than the general run of this lily. I may state here that only the tallest and finest Regale were used in breeding; on the theory that they might be elementary species. We have not had Regale long enough for me to have isolated such if they exist. I simply took the chance that the plants selected for crossing might be such.

The anthers of the second group were of two types; very large as in Regale, smaller as in Madonna. The anthers of Regale are glorious organs to a hybridizer, for they contain much pollen.



If the plants of the first group were again crossed with Madonna, they would break up and we might get a fine Madonna with the vigor of Regale.

At present the departure from white is so little they might serve for Easter lilies.

A distinguished authority has recently stated in *HORTICULTURE* that rich manure and fertilizers are fatal to Regale. This statement requires to be modified under some climate and soil conditions, especially where we wish to try to make the flower sport. In this climate they do well with fertilizer. Manure is disliked by both lilies and iris in my garden unless it is in the condition described by Celia Thaxter in that charming book—*An Island Garden*. This work is now a garden classic for the author was a poet as well as a skilful gardener. The hybrid lilies described in this letter were all grown in soil which was treated with the following fertilizer and stimulant before the seeds were planted; using it at the rate of one pound to ten square feet. The seeds were always planted in the open ground in May.

Formula—Basic Slag or Acid Phosphate, 20 pounds; Nitrate of Soda, 10

pounds; Sulphate of Potash, 10 pounds; Oxide of Iron, 10 pounds; Oxide of Manganese, 10 pounds; Permanganate of Potash, 1 pound; Thorium oxide, 1 ounce.

To thoroughly mix the ingredients a barrel churn was used. This queer combination was one of the many experiments tried here, and as it happened to be the one on which this particular hybrid was raised it is given without making any claim to its being a scientific mixture.

When the seedlings were about six inches high they were watered with a liquid fertilizer containing one ounce of nitrate of soda and the same amount of sulphate of potash in a common garden watering pot.

WILLIAM ROLLINS.

SPRAYING APPARATUS.

If there is any one thing a florist and gardener should have properly fitted to do the work very thoroughly and with the least lost motion it is the spray rig.

Ninety per cent. of the insects and parasitic fungus diseases injurious to trees and plants are hatched or developed under the foliage and during the period of development derive their

nourishment from the under side of the foliage. As the insects mature they wander a little further away in search of new feeding places. But the cankerous growth of the fungus remains rooted, so to speak, on the under side of the foliage slowly eating its way to the upper surface of the foliage when it comes to full development and ready to spread its millions of spores unless checked.

The compressed sprayer holding from 3 to 3½ gallons is the one most generally used by florists and gardeners and is usually fitted with a short piece of hose to which a spray nozzle is attached; this is all right for spraying potatoes, cabbage, etc., but when you must hit the underside of the foliage your requirements are a piece of hose at least 30 inches in length to which is attached an extension pipe 2 feet in length fitted with an elbow to which the spray nozzle is attached. With your spray tank thus fitted you can do much better work with less exertion on your part and cover all the plants with the spraying solution.

SOCIETY OF AMERICAN FLORISTS AND ORNAMENTAL HORTICULTURISTS

THE SECRETARY IN THE CON- VENTION CITY.

The Secretary duly arrived in the Convention City, and reported "ready" to the Advisory Committee, Vice-President E. A. Fethers, Philip Breitmeyer and Wm. Dilger, who were not only anxious to advise but to lend material assistance, making the work of preparing for the big Trade Exhibition comparatively easy.

The Secretary's first day was spent in Arcadia Auditorium, making final decisions as to extra space. The unprecedented demand for space in the Trade Exhibition made it necessary to amend the preliminary plans somewhat.

It has been decided to hold the Convention sessions on the second, or balcony floor, where permanent seats are arranged to accommodate 1,000.

The exhibition of the American Gladiolus Society will be held on the same floor, two long tables being provided to extend the full length of the balcony on both sides. A good supply of water is handy for use of the exhibition in this organization.

As the Auditorium opens its regular season for dancing on the Saturday following the Convention, August 23rd, exhibits must all be removed from the exhibition hall on Friday, as per our lease and contract. This being the case, the local interests have decided to comply with the wishes of exhibitors that the entertainment on Friday, the fourth day, be curtailed, so there will be very little doing on that day. In addition, many of those who will attend have signified their intentions of leaving for home on Thursday night, so the entertainment features will be allowed to take up whatever time may be available during the three days of the Convention.

The changes outlined above permit of a little more space being given to the Trade Exhibition, so there is still time, if orders are sent in at once, to obtain a favorable location.

It is most impressive to see the slogan, "Say it with Flowers," displayed in every flower store in the city, and also on the wind-shields of the florists' automobiles and delivery cars. This is the result of the good work of the special publicity representatives for Michigan, M. A. Vinson

In the evening the Secretary had the pleasure of attending a meeting of the Detroit Florists' Club, presided over by President J. F. Sullivan, at which the ladies of the local S. A. F. Auxiliary were present. There was a good attendance and the meeting was most enthusiastic. The reports of the chairmen of the different committees showed that all arrangements were well in hand and that every visitor will be well taken care of, therefore, if everyone does not have an enjoyable time it will not be the fault of the Detroit Florists' Club.

Henry Goetz, a member of the Club, journeyed from Saginaw, a distance of 96 miles to show that there was much interest in the Convention in that section of Michigan. Mr. Goetz is also an enthusiastic booster for a Michigan State organization, and at the time of the Convention a State Society will be established, there being hope that the proposed affiliation amendments will be adopted at the Convention, in which case the state will be entitled to representation on the Executive Board.

Albert Pochelon, the energetic Secretary of the F. T. D., in his usual forcible manner reported arrangements that had been made to enlighten retail florists who are not F. T. D. members as to the wisdom of joining the organization, although Mr. Pochelon has said much in the past of the good work of the F. T. D., he still has a little "dope" left in reserve, and there is no doubt that at the Convention a goodly number will be added to his list of members. The goal for membership for the coming year has been placed at 2,000, and there is no doubt as to the possibility of this number being listed.

I would again urge upon everyone going to the Convention the importance of applying for hotel reservations to E. A. Fethers, 17 E. Adams Street, Detroit, at once. The hotels are all close together, and near the Arcadia Auditorium. If Mr. Fethers is unable to locate you at any hotel specified, he will do the next best thing, but all will be taken care of in good shape somewhere—Don't miss the Convention; it will be different from any that has preceded it, and there is a good time in store for all who come.

At present the weather is very cool

and clear, making the use of a blanket necessary at night when sleeping.

How could this Convention be anything but a success, when every one in the trade in Detroit is trying to do, or suggest something which will help to make the stay of the visitors profitable and enjoyable? Even the President of the Society, J. F. Ammann, has announced his intention of being in the city a week ahead of the Convention to see that the Secretary and the Advisory Committee have overlooked no important detail—but he will find that Vice-President Fethers has all the work well in hand.

In the Official Program, published in the Society's "Journal," President Sullivan of the Detroit Florists' Club was erroneously listed as "Secretary" of the Club. The error, of course, has been recognized.

JOHN YOUNG, Secy.

Detroit, Aug. 4.

THE TRADE EXHIBITION.

All exhibitors are advised to ship their exhibits by express in ample time, marking them distinctly "Convention of the Society of American Florists, Arcadia Auditorium, Woodward Ave., and Stimson Street, Detroit, Mich.," and prepaying all express charges.

The list of exhibitors is now quite large, but owing to some important changes in the floor plan, a few good locations for exhibits are still available, if immediate application for same is made. Any house dealing in florists' supplies or auxiliaries who is not represented at the exhibition should not overlook the opportunity afforded to bring his products before the trade, as there is every evidence that visitors from all sections will be at the Convention to bring their season's supplies.

Exhibitors desiring signs, desks, etc., should write the Secretary at once, in order that their requirements may be met in good time. The following exhibitors are in addition to those previously announced:

J. C. Moninger Co., Chicago.

F. R. Pierson Co., Tarrytown, N. Y.

Farnsworth Co., Conshohocken, Pa.
Promotion Bureau, S. A. F. Publicity Campaign.

Michigan Cut Flower Exchange,
Detroit.

(Continued on page 130)

HORTICULTURE

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One Year, in advance, \$1.00; To Foreign Countries, \$2.00; To Canada, \$1.50.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

Interest in novelties

While nurserymen may not be wholly in agreement concerning novelties and the advertising of them, there can be no doubt of the fact that they are keenly alive to the general situation, for that is evidenced by the letters already published in *HORTICULTURE*. A point which has perhaps not been touched on very largely is brought up by a well known nurseryman in a personal letter in which he says:

"Happily there is a change coming over the face of America, thanks to the open eyed and out of door trend of our people; thanks to the past and growing interest in horticulture; thank to the fact that our children are being taught in the schools and elsewhere how to grow things and to appreciate them. What is still more encouraging is the fact that within the last ten years there has been a great increase in the number of municipal gardens, and I am referring especially to rose gardens. There has been a definite establishment of rose test gardens, quite apart from the others, in two or three of the horticultural zones in this country. The American Rose Society has mapped out a campaign for doubling its membership and expects to do it. But on the other hand, its officers are equally insistent that the value of the membership shall be increased. They are hoping to develop the work of the rose test gardens. They are hoping to increase the number of municipal rose gardens, and they are planning to improve the methods of reporting results from these gardens and getting the votes as to favorites from both amateurs and professionals. This will be a guide in each locality for those who want these things and want to get these plants without wasting their money on possible disappointments. I think Mr. Wilson is quite right in the points he makes, including the fact that many of us who know how to grow things don't know how to sell them."

Quarantine deplored

There is a very emphatic and exceedingly well worded editorial on Plant Quarantine No. 37 in the current number of the *Journal of the International Garden Club*. We are glad to quote it in full:

Under this new regime no such plantings as are to be found at the older and finer private estates, the botanic gardens, or in the Moravian Cemetery at Staten Island, will be possible ten years hence. The plants

simply will not be found in America in commercial quantities and a Board that sits at Washington and now has been granted immensely increased powers, says we must import no more. As to the merits of their case there are several opinions possible, as to the blighting effect of their action upon future ornamental planting in America there seems to be pretty general agreement.

Not only are the plants noted above excluded, but many others such as peony, dahlia, etc., and much material for propagating purposes by American nurserymen. The contention of the Board that forbidden plants may still be imported through the Bureau of Plant Industry is of little horticultural significance. Beyond a few institutions no one is likely to use this doubtful privilege, which in any case applies "only to limited quantities."

The act as it now stands (there is of course much agitation to have it repealed and the powers of the Federal Horticultural Board curtailed or withdrawn), appears as if it had been framed with deliberate intent to cripple the normal development of American gardening. The irony of the situation is that the Board has insisted from the first that on the contrary it was framed to protect our gardening and crops from destruction. Whether the truth lies on this side or that, there is little likelihood of their assumptions going unchallenged. In fact the storm of abuse to which the Board seems relatively impervious may react so that 1920 may see the end not only of Plant Quarantine No. 37 but of the somewhat overzealous regime that created it.

Landscape Gardeners' Viewpoint

Reynolds, N. C., July 16, 1919.

Dear Sir:

In your issue of *HORTICULTURE*, July 12th, I was very much interested in the discussion that came under the heading of "Novelties and Nurserymen." This discussion I offer is from the viewpoint of a landscape gardener.

It seems to me much responsibility should fall upon the nurseryman for increasing our too meagre stock of plant novelties.

I have often spent a day at a time in the Arnold Arboretum making a list of the best plants for use in beautifying home grounds. I have walked over the Arboretum with eminent horticulturists, who have spoken of such and such a fine shrub to use, and why not try this and that. But I have immediately replied "Where can such a shrub or plant be obtained, or what nurseryman offers it in his catalogue." "I don't think you can buy it anywhere," is his reply. Then if the nurseryman hasn't it we can't use it.

I have gone around private estates, a good many of them in New England, Pennsylvania and New York. The gardener with pride has pointed out a shrub here or there, perfectly hardy,—fine. "Why don't you men use this?" I reply. "Where can we obtain it?"

"Doesn't this or that nurseryman offer it?" he questions.

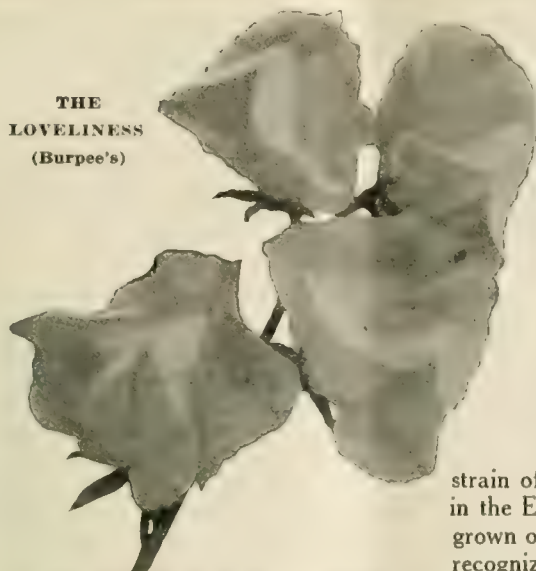
"No, it can not be obtained. Our nurserymen do not carry it in their plant lists."

We have to finally use the old sorts of material year after year with few newer kinds, because we are hampered in our selection of novel material.

What is the nurseryman doing to give us a few of the new plants, that are so rapidly being introduced by such men as Mr. Wilson?

Very sincerely yours,
 WILLIAM H. HATFIELD.

THE
LOVELINESS
(Burpee's)



Burpee's Sweet Peas

The Twenty-Two Best Winter Flowering Spencer Sweet Peas for Florists

The first Spencer Sweet Pea in existence was brought to America by W. Atlee Burpee. Since then the House of Burpee has introduced over two hundred distinct new varieties each an improvement on the past. And by constant hybridizing for the last ten years we have developed the new Fordhook Early Flowering strain of Spencer Sweet Peas. We can now offer you all the finest colors in the Early or Winter Flowering type of Spencers—everything offered is grown on our own Floradale Farm in California. The House of Burpee is recognized as the **American Headquarters for Sweet Peas.**

3390 EARLY SANKEY (BURPEE'S). This truly magnificent white was awarded a special Silver Medal when exhibited at the great International Show in New York, March 20, 1915, also Certificate of Merit at the Spring Show of the Pennsylvania Horticultural Society, Philadelphia, March 23, 1915. Black seeded. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3392 IMPROVED EARLY SNOWSTORM (BURPEE'S). The result of a cross between King White and Yarrowa, it embodies the best qualities of those two varieties and easily eclipses all early-flowering white Sweet Peas to date. The flowers are of Yarrowa size, but finer form, as the standard does not reflex but is magnificently bold, though charmingly waved. A vigorous grower, the immense flowers are invariably borne in fours on very long stems. Awarded Certificate of Merit at the International Show, New York, March 20, 1918. Our Improved Snowstorm is so immeasurably superior to our original Snowstorm that we have now discarded the latter. Improved Snowstorm is the last word in Early-Flowering White Sweet Peas. Pkt., 10c; oz., \$1.50; ¼-lb., \$4.50; lb., \$15.00.

3342 EARLY CANARY BIRD (BURPEE'S). This is a splendid, rich, deep cream or primrose colored self. The flowers are of great size, beautifully waved, and usually borne three or four on a stem. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3348 EARLY DAYBREAK (BURPEE'S). The flowers are much frilled or waved, of largest size. The color is a splendid shade of rich rose-pink on cream ground, becoming deeper toward the edge of standard and wings. The entire flower is lightly suffused with salmon. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3376 EARLY LOVELINESS (BURPEE'S). The color is white, the entire flower being suffused soft pink and the edges distinctly plicated with rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3351 EARLY ENCHANTRESS (BURPEE'S). It is a bright rose-pink, becoming deeper toward the edges of standard and wings, gradually softening in tone toward the center of the flower. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3383 EARLY PINK BEAUTY (BURPEE'S). The color is soft rose-pink on white ground, richer toward the edges, gradually softening in color as it reaches the center of standard and wings. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3344 EARLY CHERRY RIPE (BURPEE'S). A particularly bright and taking color and quite new in this section. It might be described as a glowing cherry or salmon-cerise self. Awarded Certificate of Merit at the International Spring Show, New York, March 20, 1918. Pkt., 10c; oz., \$2.50; ¼-lb., \$7.50; lb., \$25.00.

3381 EARLY ORANGE BEAUTY (BURPEE'S). Similar in color to Helen Lewis, therefore a glowing orange-scarlet with softer colored wings. Extremely free and early blooming, valuable alike for culture under glass or in the open, as it withstands the sun and weather well. Pkt., 14c; oz., \$3.00; ¼-lb., \$9.00; lb., \$30.00.

3362 FORDHOOK ROSE IMPROVED (BURPEE'S). Quite distinct from our original Fordhook Rose. The flowers are of immense size, usually borne in threes and fours on very long stiff stems. In color similar to the well-known George Herbert. A pleasing shade of rosy carmine. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3374 EARLY KING (BURPEE'S). The finest early-flowering crimson. The flowers are of great size, perfect form, averaging fully two inches in diameter. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3393 EARLY SPLENDOR (BURPEE'S). A magnificent new deep rose self. The rich rose-crimson color is accentuated by the distinct white blotch at the base of standard and wings. The flowers are of great size, usually borne in fours on very long stems. Similar in color to the Summer-flowering Rosabelle. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3386 EARLY ROSY MORN (BURPEE'S). Flowers grown under ordinary field culture have measured fully two inches in diameter. The flowers are usually borne in threes or fours on stiff, long stems. Color, a pleasing shade of rose with crimson-scarlet standard. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3375 EARLY LAVENDER KING (BURPEE'S). A first-class lavender has been much wanted in this type, therefore we have great pleasure in offering the new Lavender King. This glorious new variety is a rich, true, deep lavender throughout. Similar in color to the summer-flowering varieties, Burpee's Orchid and R. F. Felton. The flowers are of large size, beautifully true waved form, and borne in threes and fours on stems of great length. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3338 EARLY BLUE-BIRD (BURPEE'S). This is a charming shade of blue. Somewhat deeper than Wedgewood, but more of a true self, especially as the flower ages. In our opinion, the best blue for indoor culture. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3399 EARLY ZEPHYR (BURPEE'S). This is a delightful shade of pale blue or lavender. It might be briefly described as a silvery blue self. An extremely dainty and charming variety. Pkt., 7c; oz., \$1.00; ¼-lb., \$3.00; lb., \$10.00.

3380 EARLY MAUVE BEAUTY (BURPEE'S). Color a pleasing shade of rosy mauve. The flowers are of immense size, often measuring two and one-half inches in diameter, yet exquisitely waved and of best Spencer form. A strong, vigorous grower and very free flowering. Charming under artificial light. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3346 EARLY DAINTESS (BURPEE'S). This has always been a favorite since it was first exhibited in 1915, when it was certificated. We have only now been able to work up a sufficient stock to offer to our friends. A strong grower, with flowers of largest size and usually produced in fours. Color, pure white edged rose. Similar to Summer-flowering Dainty. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

3352 EARLY EXQUISITE (BURPEE'S). The ground color is a soft shade of primrose, the edge of the standard and wings being beautifully "picoteed" with deep rose-pink. Pkt., 7c; oz., 85c; ¼-lb., \$2.50; lb., \$8.50.

3361 FORDHOOK PINK AND WHITE (BURPEE'S). This is similar to the old Blanche Ferry, having a bright, rosy-pink standard with white wings, lightly suffused rose. Pkt., 7c; oz., 60c; ¼-lb., \$1.80; lb., \$6.00.

3398 YARAWA. The flowers average two and one-half inches in diameter; many are duplex or double. The color is a bright rose-pink with a clear, creamy base. Our stock of this popular Australian variety is absolutely true. Grown by us from seed procured direct from the introducer. Pkt., 7c; oz., 75c; ¼-lb., \$2.25; lb., \$7.50.

3357 EARLY FANTASY (BURPEE'S). Striped and marbled with rich rose-pink on a creamy white ground. Exceedingly bright and it makes a telling bunch when cut. Extremely free and a continuous bloomer, the flowers usually borne in threes and fours on long stems. Pkt., 7c; oz., 80c; ¼-lb., \$2.40; lb., \$8.00.

The prices quoted are net for packets as well as larger quantities, f.o.b. Philadelphia, for delivery July to December. The above varieties—each the best in its class—provide a complete range of colors. We have many other desirable varieties of Early Flowering Spencers on which we shall be pleased to quote prices upon request.

W. Atlee Burpee Co.,

Seed Growers Philadelphia.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

It shouldn't be understood that the Roving Gardener spends all his time rambling around through other peoples' estates. Providing bread and jam for the wife and youngsters is not a simple task in these days of inflated prices, especially in line of work where the returns have not kept pace with the upward soaring tendency of supplies. This is only a preliminary to speaking of the success of my experiments with mulching as a means of saving labor in the vegetable garden. It is a common thing, of course, to mulch strawberries and some other crops, but the plan of using a mulch on potatoes is newer, although it has been tried out for a year or two by certain garden makers in the east and has been widely recommended in Missouri where, in fact, some of the farmers are growing several acres of potatoes by this plan. The proof of the pudding, or rather of the spuds will be in the eating, of course, but my plants which have never been cultivated seem just as thrifty as those of my neighbors where much back breaking work with the hoe has been put in. The seed potatoes were planted about two inches deep in little furrows made with the wheel hoe. They were covered with this hoe and then the straw spread deeply over the patch. The potatoes grew through this straw with the utmost ease, but most of the weeds and grass have been unable to penetrate it. Moreover, the soil has been kept as moist and mellow as it could have been by frequent cultivation. What the yield will be is yet an unknown quantity, but I hope for the best. If the potatoes do not turn out well I expect I shall have a rather interesting time replying to the gibes of my sceptical neighbors and friends.

Doubtless in a wet season this plan would not be a very good one to follow. But I see no reason why it shouldn't work as well on the potatoes in a dry season as it does with tomatoes, which I also have under a mulch and which are thriving splendidly. Speaking of tomatoes, by the way, I want to say a good word for the John Baer, which is one of the best varieties with which I have experimented. It comes early, has a good color, and the quality is excellent. Moreover, it bears freely over a long season. The only other tomato with which I feel

like comparing it is the Marketeer, the seed of which I obtained from a western grower and which made a splendid crop.

It is always interesting to observe what the English publications have to say about American books, especially when they assume a certain lofty tone of superiority. In reviewing "Strawberry Growing," by L. W. Fletcher, the Journal of the Royal Horticultural Society says: "From a scientific point of view the chapter on pollenization is interesting as showing that unisexual varieties are still grown in the States. It is curious that these types should persist when they have for so long been discarded in Europe." As a matter of fact, some of the imperfect strawberries are very valuable for their high quality which is the reason, no doubt, that they have been kept in cultivation here. One statement which the writer of the review makes is of special interest. He says: "The writer's experience with American varieties has been one of unbroken fail-

ure and a curious problem in adaptation arises which tempts to further study." It is a fact that the two countries seem to have little in common as concerns varieties. In Mr. Fletcher's list Royal Sovereign is the only English variety listed as being grown in America and across the water it is considered as among those of less prominence.

In the Journal's review, "Plant Propagation," by M. G. Kains, a book which HORTICULTURE has been glad to carry in its advertising columns for some time, received only words of commendation. The remarks upon the effect of grafting to those who long for plants upon their own roots and make didactic statements as to the peculiar value of these above grafted ones, seem to be particularly welcome.

RHODODENDRON.

Miss Louisa Hunnewell.

I am very glad that I can show the readers of HORTICULTURE a picture of the new rhododendron Miss Louisa Hunnewell, for which Mr. T. D. Hatfield has been awarded a gold medal, as published last week. It is a splendid flower and certainly is a valuable addition to the list of hardy rhododendrons.



New Azalea from Wellesley, Mass.

TIMELY GREENHOUSE NOTES.

Primulas should be sown now for blooming between the end of February and Easter. Seven months are required from the date of sowing primulas until the time of their blooming. For sowing, shallow boxes or seed pans should be used, these boxes being filled not quite full with a mixture of light loam, leaf mold and sand. If the seeds are soaked in water for a day and night more even germination will be obtained. It is of vital importance that the seed should be fresh. The young seedlings will be ready for pricking out in five or six weeks from the time of planting. Instead of pots use flat boxes or seed pans filled with a mixture of one part common soil and two parts of peat. Pot the young plants rather loosely when they have made three or four leaves, using small pots, and do not set them too deep. Place these primulas in a frame where they can have plenty of air.

When rose plants begin growing, and the roots start working in the soil, an increased area must be watered so that the plants will not suffer. The new roots will be very tender and will die if they come in contact with hot dry soil, and this must not happen as it is very important to keep the plants growing all the time. Scratch the earth away here and there to see how far the roots have penetrated into the new soil and try to keep the soil wet just half an inch beyond this circle. Sometimes during these hot summer days the plants become quite dry, in which case care must be taken not to wet the foliage when watering, as burning is likely to result. The grower is always on the safe side if he trains all men to water without wetting any leaves at all, no matter what the weather may be. This work is as important as any other in rose growing, and should be done neatly and well, avoiding the splashing of water all over the place.

It is possible to have sweet peas do fairly well through the early winter now, as they have been so greatly improved. Select the best varieties in white, pink, lavender and scarlet. To do their best they should be in a house by themselves, and at least six feet of headroom is needed. Allow four feet between the rows and do not sow too thick. Sods piled up last fall make a very good soil to use. To every three loads of soil add one load of well rotted cow manure and a pailful of bone dust. Syringe the plants on all bright days and give an even amount of moisture at the roots.

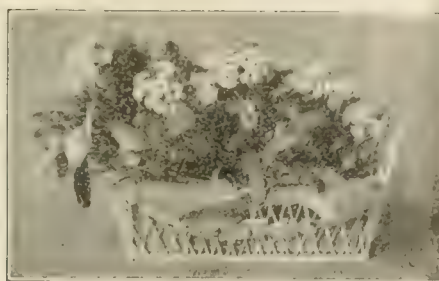
Do not let the work of repairing the houses, boilers, piping and glass drag

along until cold weather sets in. Now is the time when it should be attended to. Where the putty is in bad condition, it is sometimes best to lift out the glass and to reset it after repairing and repainting the sash bars. Good stock cannot be produced in draughty or leaky houses, and repairs should be made while the wood is dry and the weather such that a few hours' exposure to the open air will not affect the plants. Ventilators, boilers and machinery should all be put in good working order.

Callas should be started now for early winter flowering. Remove all old soil and pot in 6 or 7-inch pots. Use three parts fibrous loam to one part well decayed cow manure, and provide good drainage. Put in a cold frame until the first week in September. Discard all which are soft and flabby or show spots of moldy decay, as well as those which have started a thin, spindly growth. Many growers use only fresh roots each year, as they are not expensive. Care should be taken not to overwater at this stage, as they make roots slowly.

The Annual Meeting of the Florists' Hail Association of America will be held in Arcadia Auditorium, Detroit, Michigan, at 9 A. M. on Wednesday, the 20th day of August, 1919.

JOHN G. ESLER, Sec.



Florists' Baskets, Ribbons and Supplies

Our exhibit at the convention will give you a faint idea of our up-to-date line in Ribbons, Baskets, etc., and we will be pleased to have you look us over. Most of the samples shown are our own exclusive designs, evolved from many years' experience in the Florist business.

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NEW YORK TO DETROIT.

The New York Florists' Club has decided to travel by way of the Lackawanna railroad to Buffalo, thence by boat to the convention city. The party will leave New York Sunday, August 17, at 8.30 p. m., Hoboken 8.55, and Newark 9.08 p. m., arriving at Buffalo 7.30 the following morning, spending the day in that city and Niagara Falls. Thence by the 6 o'clock boat, Monday night, arriving at Detroit 8 a. m. Tuesday. The railroad fare, New York to Buffalo, is \$12.83; lower berth in Pullman \$2.16, upper \$1.62, including war tax. Boat fare, Buffalo to Detroit, \$4.32; stateroom (two persons) \$3.78.

From the way we are receiving applications it looks as if we should have over 100 in our party. Up to date we have the assurance of over 50 and if we receive 80 applications we are guaranteed a special train.

If you intend taking this special train, the committee urgently requests you to notify it at your earliest opportunity, as at this time the season traveling conditions are very heavy.

On August 11, between the hours of 2 and 5, the city passenger agent will meet the committee at Mr. John Young's office, 1170 Broadway, corner 28th street, New York city, to receive the remittances for reservations. This is the last day for making reservations, so if you cannot attend, mail in your check so it will reach me by this date and avoid confusion at train time.

For hotel accommodations, write Mr. E. A. Feters, Vice-President S. A. F. and O. H., 17 East Adams Avenue, Detroit, Michigan.

If you desire further information, communicate with the Chairman, Mr. A. L. Miller, whose post office address is Jamaica, N. Y.

Yours truly,

A. L. MILLER, Chairman,
J. G. ESLER,
P. W. POPP,

Committee.

THE HORTICULTURAL SOCIETY OF NEW YORK

There will be a gladiolus exhibition August 23 and 24 in the Museum Building, New York Botanical Garden, Bronx Park. Schedules are now ready for distribution and will be sent on application to the secretary, George V. Nash, New York Botanical Garden, Bronx Park, N. Y. city.

In this connection attention is called to the large collection of gladioli in the Horticultural Gardens of the New York Botanical Garden, in the south part of the grounds, only a short distance from the South Gate. Here are brought together about 250 kinds.

GEORGE V. NASH, Sec.

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THE COMMON SNOWDROP.
(*Galanthus nivalis*)

A bulbous and scapigerous herb,
with a solitary pendulous white
flower.

Root fibrous; fibres slender.

Bulb small, ovoid; outer scales
membraneous.

Leaves two, radical, linear, short
at time of flowering, but lengthening
considerably afterward, glabrous, in-
closed at the base in a membraneous
sheath.

Inflorescence, a solitary scapigerous
flower; scape compressed, about six
inches tall, with a two-fir and two-
nerved spathe.

Flower, solitary, drooping, sweet-
scented, upon a short foot-stalk.

Perianth, superior, divided down to
the ovary into six segments in two
series; the three outer ones pure
white, oblong, about eight or nine
lines long, and spreading; the three
inner about half the length of the
outer, erect, notched, usually tipped
with green.

Stamens, six, in two series, seated
upon the ovary; anthers pointed
connivent, opening at the top by
pores.

Pistil, united; ovary inferior, three-
celled; style subulate; stigma, simple;
ovules several, in two rows on the
inner angles of each cell.

Fruit not present.

Native of the woods and shady
pastures of central and southern
Europe, extending eastward to the
Caucasus and northern into Holland;
naturalized in Great Britain and
Ireland. Cultivated for many cen-
turies past, and blossoms in early
Spring.

Appreciated from time immemorial
by the ordinary people of western
lands as harbinger of spring, and re-
garded as an emblem of innocence,
constancy and purity.

By the Federal Horticultural Board
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HOW MUCH DO YOU LOVE HER?

A Patriotic Appeal from Congressman
M. L. Davey.

The following article from the pen of Congressman M. L. Davey and appearing in the Davey Tree Bulletin has attracted considerable comment and HORTICULTURE is glad to reproduce it with permission:

There are a hundred million of us, bound together by an invisible bond, nurtured by a common spirit, fostered by the same blessings, protected by a mutual power, inspired by an all-pervading ideal.

There are physical limitations, of course, and temporal qualities. There are the great oceans to the east and to the west of us. There are imaginary lines separating us from other people on the north and south. There are the wide stretches of country, beautiful hills and majestic mountains, fertile valleys, stately rivers and murmuring brooks, wonderful trees and forests, rare and plentiful flowers, fine homes and great cities, a multitude of factories and places of work, splendid edifices and institutions of learning.

But WE are America. We—a hundred million of us—make this nation great or small. We interpret and apply the spirit of the past. We make the national voltage of today. We shall leave to another generation the qualities of life and purpose which we develop as a people. We are the soul of this republic.

The American people have never failed in a great crisis, from the first throbbing moment when the nation was born until today. But, sadly enough, it seems to take a threatening emergency to develop and make

manifest our real character. We rise to heights of patriotic fervor in times of real stress. We do great and wonderful things. We show a unity of purpose and a national consecration that is wonderful to see and live through.

But how far our zeal subsides and our animation cools when the emergency passes! How much we drift apart and separate into selfish, careless groups! How little concern we show for the vital affairs of country as we travel our separate ways of life! How thoughtless we become of the great nation which is ours! How gayly or sadly we plod along in blind faith that somehow or other God in Heaven will keep our nation safe and make her great!

This country—this republic—is ours to make what we will. It will be safe as we make it safe—and by high Heaven, as we keep it safe. It will be great as we live the life of national greatness, young of limb, keen of eye, big of thought and worthy of deed.

A hundred million of us is America—you and me and all the rest. God give us the inspired purpose to see and live the great life of a noble nation. May we maintain our patriotism and our devotion at a constant high level. May our reverence for the flag and the things that it symbolizes be and always steadily remain a living thing, a vitalized fact.

M. L. DAVEY.

NEXT WEEK!

Convention Number

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NEW YORK

ST. LOUIS.

The weather is extremely hot and
trade outside of funeral work is slow.
Young roses are showing improvement.
Asters are looking better and gladioli
are somewhat plentiful.

The outlook is for a large represen-
tation from St. Louis to Detroit, about
forty signifying their intentions to at-
tend.

Bob Newcombe, Sam Levine and
Sam Seligman were visitors this week.

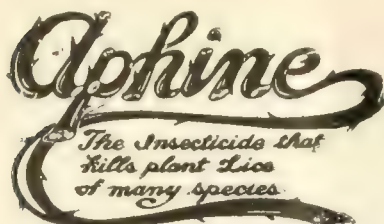
OBITUARY

Robert Montgomery.

Just as we are about to go to press
word comes that Robert Montgomery,
rose grower of Natick, Mass., passed
away Tuesday morning, August 5th.
He was a member of the Gardeners'
and Florists' Club of Boston, also a
prominent Mason and Knight Tem-
plar

Robert Karlstrom.

Robert Karlstrom, one of the best
known landscape architects in New
England, having had supervision of
much of the work of laying out the
gardens in Elizabeth Park, Hartford,
also the grounds for many private
parties in that city, died at his home
in Cromwell, July 24, at the age of
50 years. He was born in Sweden.
He leaves besides his widow, four
daughters and one sister. The de-
ceased was a member of Washington
lodge, No. 81, A. F. and A. M. of
Cromwell, and a member of the Royal
Arcanum. He has been in the em-
ploy of the firm of A. N. Pierson, Inc.,
for the past five years, as landscape
architect.



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.

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For mildew, rust and other blights affecting flowers, fruits and vegetables.

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For eel worms, angle worms and other worms working in the soil.

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Couplings furnished without charge

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SODIUM CYANIDE FOR IRRIGATION.

July 29th, 1919.

Dear Sir:—On page 59, Volume 30, No. 3 of HORTICULTURE, published July 19th, 1919, I find a summary of a paper on Hydrocyanic Acid Gas in Greenhouses, by William Hunt of Guelph, Ontario. For the most part the information given in the summary is pertinent. However, it has occurred to me that it would be desirable to call to your attention the fact that sodium cyanide has in recent years practically superseded potassium cyanide for fumigation purposes. In fact it is practically impossible to purchase on the American market potassium cyanide suitable for fumigation work. On the other hand, sodium cyanide is made in this country and can be purchased from numerous dealers.

Inasmuch as florists will experience great difficulty in securing potassium cyanide suitable for fumigation work, it is suggested that in the near future you advise them through your paper that sodium cyanide is fully as satisfactory as potassium and can be purchased in nearly all of the large cities.

Information on sodium cyanide is given in Farmers Bulletin 880, entitled "Fumigation of Ornamental Greenhouse Plants with Hydrocyanic Acid Gas," a copy of which is enclosed.

Very truly yours,

E. R. SASSER, Collaborator.

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

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NEWS AND COMMENT

PHILADELPHIA.

Charles Sim leaves on the 15th inst. for a six weeks' sojourn among the Pocono mountains.

Frank M. Ross is on a vacation hobnobbing among the Canadians along the shores of the picturesque St. Lawrence. He writes under date of August 2 that "all's well and having a glorious time."

C. U. Liggitt reports a brisk demand among the growers for all kinds of growing stock. He is enthusiastic over the newer roses and predicts a bright future for many of them. As an index of how the wind blows he mentions among the recent sales an item of 17,000 plants of Premier and Columbia to the Florex Gardens—to take the place of two houses of carnations which that firm has discarded. Mr. Mayhew, the Florex manager, is one of the most up-to-date among the younger men in the growing end.

The next time you see Commodore Westcott ask him what happens when he forgets his grip around the wholesale centers. It is rumored that the Board of Health were called out the last time, looking for Barnegat trophies. Wild creatures from the woods acquiring that rarity the gourmand swears by? Or perhaps some of those fish Denny failed to catch? At all events, it seems to have been an exciting time and to have wound up in Limburger without crackers. Moral: Hang on to your grip, if there is anything in it likely to cause trouble.

Referring to "the fish that Denny didn't catch," that is an old story but

for the benefit of newer readers we may mention that once on a time in Barnegat Bay, Denny at the south end of the boat had fished all forenoon without getting so much as a bite while Bill at the north end had pulled in a good mess. After the session was over the question was asked, "Why didn't Denny catch any fish?" The reply came promptly from Bill's direction, "Dumbness," said he, "just pure Damn Dumbness." Since that day Bill has been a strong upholder of the theory that there is no such thing as "luck" in fishing. It's either skill or the other thing.

Recent Visitors—H. V. Hunkel, Holton & Hunkel, Milwaukee, Wis.; A. D. Kinkade, Pattonsburg, Mo.; H. K. Rohrer, Lancaster, Pa.; Carl Lindroth, Randolph & McClements, Pittsburgh, Pa.; Emil Bodmer, Catasqua, Pa.; Charles H. Cook, Catonsville, Md.; Thomas Vincent, Baltimore, Md.

ROCHESTER.

Business during the past week has been dull. Carnations are scarce and poor; most of the carnation growers are now ready to plant their new plants. Roses are improving and are fairly plentiful; good Ophelia, Maryland, Sunburst and Killarneys are meeting the demand. Good garden peas are arriving. Some exceptionally good gladiolus are on the market and are good. Some very good white Asters are on the market and sell easily.

Mr. and Mrs. E. C. Armbrust are spending a two weeks' vacation at the Berkshire Hills.

Mr. and Mrs. H. Barber are spending two weeks at Keuka Lake.

CINCINNATI.

Joseph Grimme, formerly with R. D. Ruttle, at Covington, has returned from the service. He had been in France for almost a year.

E. G. Gillett has been finding an active market for his water lilies.

H. W. Sheppard is so far on the the road to recovery that he is able to get about his home.

Recent visitors were S. M. Rosenfeld, representing Wertheimer Bros., New York City; Jos. Hill, Richmond, Ind.; Mr. and Mrs. Ira Clark, Greensburg, Ind.; Fred Rupp, Lawrenceburg, Ind.; Mr. and Mrs. G. W. Frisch, Dayton, Ohio, and William Nolan, formerly of this city but now of Huntington, W. Va.

NEW ENGLAND.

Ralph L. Gustin, of 5 Dickson street, Somerville, and Lewis W. Phinney, of Arlington, have bought the extensive market gardening and greenhouse business of Arthur C. Frost, Riverton road, Portland, Me.

H. M. Totman Co., of Randolph, Vt., is organized to operate a greenhouse in Randolph, with a capital stock of \$35,000. The papers are signed by Harry M. Totman, Edson E. Gifford, and Hortense L. Flint, all of Randolph.

To construct a huge greenhouse, 75 feet wide and 130 feet deep and have it ready for occupancy in 14 days from the day the first shovelful of earth was turned, is the contract assumed by Zickell Bros., contractors, who have a crew of workmen erecting a large greenhouse for Michael P. Quarrey at 877 Main street. The contractors are not letting much grass grow under their feet, and the scene of activity is one of the liveliest in Worcester, Mass.

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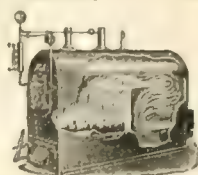
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(Signed) CHRIST. WINTERICH,
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(Continued from page 119)

Earl L. Hempstead, Burlington, Ill.
H. V. Pearce, Detroit.

The Greening Nursery Co., Monroe, Mich.

The Secretary's address is Hotel Statler, Detroit, Mich.

JOHN YOUNG, Secy.

NATIONAL PUBLICITY CAMPAIGN.

The improvement in the support of our Campaign Fund noted in these columns in the last two weeks is sustained, the aggregate of contributions in this article being greater than for some time reported. Our committees are pleased indeed at the showing made, and feel greatly encouraged. They are going ahead with their plans for a lively campaign this fall, and hope to mature them for presentation at a joint meeting to be held some time during the Detroit Convention.

With many of the contributions come hearty endorsements of the work of the committees. The efficacy of the Campaign is no longer doubted, and from all over the country come assurances that its influence for good has been felt.

Still, our Promotion Bureau has a long list of florists who have not yet made a contribution to the Fund. If these business men would decide what they are going to do, our committees could plan intelligently, for they would know what was likely to be behind them when completing plans. As has been said a number of times, contracts for magazine space must be made weeks ahead of publication, and it is not in our best interests to be cut out of some prominent publication because of unpreparedness. In other lines of trade money for publicity work is quickly forthcoming, and plans consequently matured and put into execution without uncertainty such as we have had to experience. The jewelers have now resolved to raise a fund of \$300,000, and are offering a substantial money prize for a slogan.

We are approaching the half-way

stage of the Fund, but considerably over a month late. Shall we reach our goal? We believe we shall, but we must have more support. Our subscription list to June 28th has been published and distributed. Do not withhold a subscription because you do not see Mr. So-and-So's name on it. He may be waiting to see yours. Look over our lists published in the trade papers each week, and notice now and then some community makes a clean-up. Observe, for instance, how Texas figures in the list this week. Why not round-up your fellow craftsmen in your own neighborhood, you would certainly be doing them a favor. We want your help, and it could hardly come at a better time than now.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated.

Anton Fiehe, Tampa, Fla.	\$5.00
H. L. Chadwick, Houlton, Me.	5.00
Fischer & Burkland, Youngstown, O.	5.00
John Schoepfle, Chicago, Ill.	5.00
Louis H. Kysk, Cincinnati, O.	25.00
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Huga Busch, Jefferson City, Mo.	20.00
Carl Brehmer, Chillicothe, O. (1 yr.)	10.00
Colorado Seed Co., Denver, Col. (1 yr.)	5.00
Geo. Ball, Glen Ellyn, Ill.	10.00
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Edw. Schmeltchopf, Park Ridge, Ill.	5.00
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Donnelly Floral Co., Wichita Falls, Texas (1 yr.)	25.00
Carroll Florist, Houston, Tex.	15.00
E. W. Judge, Tyler, Tex.	10.00
Edward Green, San Antonio, Tex.	5.00
H. Kaden, Gainesville, Tex.	5.00
Dennison Greenhouses, Dennison, Tex.	5.00
Edw. Green, San Antonio, Tex. (addl.)	20.00
Mrs. M. O. Nauman, Paris, Tex.	5.00
Baker Bros., Ft. Worth, Tex. (addl.)	25.00
Alff The Florist, Austin, Tex.	7.50
Hyde Park Floral Co., Austin, Tex.	10.00
E. Friedrich, Austin, Tex.	5.00
Greenwood Floral Co., Ft. Worth, Tex.	50.00
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Mrs. D. H. McNaughton, Palestine, Tex.	5.00
Mrs. H. Zinke, Palestine, Tex.	5.00
Chas. H. Alff, Austin, Tex.	5.00
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Texas State Florists' Assn., Fort Worth, Tex.	50.00
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Goshen Floral Co., Goshen, Ind. (1 yr.)	5.00
The Redline Co., Niles, Mich.	10.00
C. L. Powell, Mishawaka, Ind.	10.00
Heaven Flower Shop, Benton Haven, Mich.	10.00
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Ralph W. Ward, Cameron, Mo.	10.00
Albert Kehrer & Sons, Martins Ferry, O. (1 yr.)	5.00
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A. L. Randall Co., Chicago, Ill.	200.00
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Herbert A. Pennock, Jupiter, Fla. (1 yr.)	5.00
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F. Macree Sons, Providence, R. I.	25.00
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G. Messeberg, Brooklyn, N. Y.	10.00
Eric Buchholz, Muncie, Pa.	10.00
Geo. H. Angermueller, St. Louis, Mo.	10.00

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August 2, 1919.

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Three New, Beautiful, Hardy, Climbing Roses: Victory (Light Pink); Freedom (The Climbing White American Beauty); Fred'k R. M. Undritz (Dark Pink). Read the description in the 1919 American Rose Annual. 2-year plants cut back to 2 to 3 ft., out of 6 and 7 in. pots, \$3.50 each. The above three for \$10.00. Cannot sell more than two of a kind to any one buyer. Cash with order, please. REINHOLD UNDRITZ, 188 Greenleaf Ave., West New Brighton, N. Y.

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LILIES OF THE VALLEY.

Please publish something about the forcing of lilies of the valley for market purposes.—Subscriber.

We can do no better than to quote Professor Edward A. White, of Cornell University, who writes in his book on "Principles of Floriculture" as follows:

"Lilies-of-the-valley, being a short crop, lend themselves readily for forcing, and at any season of the year. The pips are mostly French, German and Holland grown. German pips are considered best for early forcing. The wholesale price varies, but is approximately thirteen dollars a thousand. The pips are received in bundles of twenty-five, and to have them force evenly it is considered essential to freeze them for a week or two. This may be done by leaving them packed, in some open shed, taking them out for forcing as required. They are often kept in cold storage for summer use. Few new roots are made in forcing.

"When lilies-of-the-valley are to be forced in large quantities, special houses and beds are constructed for them. In a smaller range an ordinary propagating bed with bottom heat may

BULBS

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Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c.; 3000 for \$1.00 postpaid. I. L. PILLSBURY, Galesburg, Ill.

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Peony Dahlia Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker, Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

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Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2 1/4-inch pots at \$15 per 100—larger quantities on application. J. H. FIESSER, 711-741 Hamilton Ave., North Bergen, N. J.

be used. They take no nourishment from the soil, so sand is the best medium in which to force them. The bundles of pips are thawed slowly, the pips separated and set as evenly as possible in the beds. The sand in the bench should be about two inches deep, and the pips are placed in rows about two inches apart. The pips are placed about three-quarters of an inch apart in the row. A bottom heat of 85 degrees may be given at once, but it is better to start them at 50 degrees and gradually increase the temperature. This gives the flowers better substance than when forced rapidly. A light frame should be built over the sand in which the pips are placed, and this should be covered with heavy paper or cheesecloth to give sufficient shade to draw up the stems."

LADIES' S. A. F.

A theatre club is being formed for the pleasure of ladies attending the Convention at Detroit. Any lady is eligible and invited to join upon payment of 50c. dues. See Mrs. Chas. H. Maynard who has it in charge at Convention Hall, Tuesday, Aug. 19th. Date of entertainment to be announced later.



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By M. G. KAINS

Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

After a few pages of introduction the author discusses Plant Physiology as related to pruning. A chapter takes up the Philosophy of Pruning, itself a very interesting subject. Then follows a classification and clear discussion of Buds, very fully illustrated from life. How Wounds Heal is an exceedingly interesting chapter, as are also those on Prevention and Repair of Mechanical Injuries, Pruning Nursery Stock, Young Trees, Mature Trees and Odd Methods of Pruning and Training, Rejuvenating Neglected Trees and Practical Tree Surgery.

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HORTICULTURE PUBLISHING CO.
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Plant Propagation, Greenhouse and Nursery Practice

By M. G. KAINS

We have had many inquiries from time to time for a reliable and up-to-date book on plant propagation, but were always at a loss to find any publication that we could recommend. The subject has been dealt with in fragmentary manner only in books that have come to our notice. So it is well that this new work has been issued, especially as it is both comprehensive and practical, and it should meet with a ready sale among plantmen, nurserymen and gardeners. There are nineteen chapters covering in detail topics of germination and longevity of seeds, propagating by buds, layering, cuttings, grafting, etc., fruit tree stocks, scions, etc., and there are eight pages of condensed cultural instructions in tabulated form, covering annuals and perennials from seed, woody plants, evergreens, vines, bulbs and tubers, greenhouse and house plants, ferns, palms, water plants, orchids and cacti. The illustrations are numerous, comprising 213 figures and halftone plates. There are 322 pages well bound and on heavy paper, teeming with helpful information. It is a book which no cultivator can afford to do without. It is worth many times its price. Copies can be supplied from the office of HORTICULTURE at publisher's price, \$1.50.

HORTICULTURE PUBLISHING CO.
147 Summer St., Boston, Mass.

HORTICULTURE

Vol. XXX

AUGUST 16, 1919

No. 7

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

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We want you to know them. May we send you full descriptions? Your request will bring it.

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Smithii, 6-inch pots	1.00 each
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Here is a shaft for the many skeptics whose consciences have not yet prompted them to contribute to the Campaign Fund, and who console themselves with the idea that because people do not come into their stores and announce that they do so owing to the impression made upon them by our national advertising, the campaign must be fruitless.

If flower buyers were to do anything like this, subscriptions would come in avalanches. And yet our publicity is accomplishing its purpose. Flower buying is certainly stimulated, and the stimulation is noticed by very many of our craft, just as it is by the Drum Seed & Floral Co.

Whenever you see the word "additional" in connection with the announcement of a subscription, you may be sure that the person or concern making the contribution is in earnest, and realizes full well the great value of the Campaign.

New Subscriptions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

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Topeka Floral Co., Topeka, Kas....	5.00
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Size 1 1/2-5/8ths inch (large)	\$8.50
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1,311,318. Marker for Corn-Planters. Ray Cofman, Bloomtownship, Fairfield county, Ohio.

1,311,382. Grass-Harvesting Machine. Richard Wallace Cureton, Lordsburg, N. M.

1,311,411. Plant-Chopper. Silas W. Martin, Oglesby, Tex.

1,311,530. Plow. Andrew Saltzer, Los Angeles, Cal.

1,311,773. Disk Plow. Charles T. Ray, Louisville Ky., assignor to B. F. Avery & Sons, Louisville, Ky.

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HORTICULTURE

Vol. XXX

AUGUST 16, 1919

No. 7

READY FOR THE CONVENTION

The stage is set for the big convention of the Society of American Florists and Ornamental Horticulturists at Detroit next week. It has been nearly 20 years since Detroit had a convention of this organization before, and the members of the trade in the lake cities are determined to make the event one which will be remembered for more than twenty years to come. Detroit is an ideal city for a convention of this sort, and the time of year is a good one for getting together.

The members of the Detroit Florists' Club have been very active in their preparations. The officers of this club are as follows:

President, J. H. Sullivan, 361 Woodward Ave.

Vice-President, M. Bloy, 880 Van Dyke Ave.

Secretary, Henry Forster, 1633 Woodward Ave.

Treasurer, J. K. Stock, 518 W. Warren Ave.

Other members of the club who will take part in greeting the visitors are the following committee chairmen:

Charles H. Plum, Subscription Committee.

Walter Taepke, Music and Entertainment Committee.

Joseph Streit, Bowling Committee.

Wayne McLaughlin, Badges and Publicity Committee.

The convention is to be held in the Arcadia Auditorium at the corner of Woodward Ave. and Stimpson St., in a central location, ten blocks from City Hall Square. The hall is well suited for such a meeting as will be held there and for the staging of many exhibits.

The trade exhibition promises to be one of great interest and value. The judges appointed to serve at this exhibit are as follows:

Sections A, B and F—Plants, cut blooms, bulbs, seeds and garden requisites—A. L. Miller, Jamaica, N. Y.; Irwin Bertermann, Indianapolis, Ind.; and Fred Meinhardt, St. Louis, Mo.

Sections E and G—Florists' supplies and miscellaneous exhibits—R. C. Kerr, Houston, Tex.; F. C. W. Brown, Cleveland, O., and V. X. Gorly, St. Louis, Mo.

Sections C and D—Boilers and heat-

ing apparatus and greenhouse structures—E. Allan Peirce, Waltham, Mass.; F. H. Traendly, New York, and F. R. Pierson, Tarrytown, N. Y.

As soon as the members reach the convention hall they should register at the secretary's office, which will be found at the left of the entrance. Close by will be a bureau of information, where questions of all kinds will be answered. One inconvenient feature about the convention will be the congestion due to heavy travel. Trains undoubtedly will be crowded, both coming and going. For that reason it would be wise to make arrangements for leaving as soon as possible after reaching the city.

Detroit being a very attractive city, no doubt many visitors will wish to look it over. The local florists appreciate that fact, and an automobile committee has been appointed. Moreover, it has been agreed that the cars belonging to the Detroit Florists shall be at the disposal of their guests as long as the convention lasts, which means that the beauties of the city, including the splendid Belle Isle Park, can be visited with the greatest of ease. Doubtless, too, many of the visitors will wish to view the manufacturing district, where automobiles are turned out by the thousands. The cars of the local florists may be identi-

fied by the slogan: "Say it with flowers," which will appear on the windshield. These cars will be outside the convention hall as well as at the entrance of Hotel Statler, and it is announced that they may be commandeered by any of the visitors. All cars which bear the slogan mentioned may be stopped by any member of the organization who wishes to ride to or from the convention hall.

The President's Reception will take place Tuesday evening, at 8.30, and will be held at the Hotel Statler. President Ammann has stated very emphatically that the reception will be purely informal and that there will be no occasion for evening dress.

Several important amendments are to be voted on during the convention. Among them is one to raise the annual dues from \$3.00 to \$5.00 per year, and the life membership dues from \$25.00 to \$50.00. The matter of a National Flower Show Committee, which has been discussed for some time is provided for under the amendment which reads as follows:

National Flower Show Committee.

The committee shall consist of six members, with the president and secretary as ex-officio members. The present chairman shall hold membership for a term of six years from January



Where the Meetings Will be Held

1, 1912. The balance of the committee shall cast lots to determine the retirement of one member annually, beginning January 1, 1913, and the vacancy so made shall be annually, on January 1, filled by the appointment of one member by the president taking office. On January 1, 1919, and annually thereafter the president shall appoint one member to serve for a period of six years. The president shall also fill vacancies arising through death or other causes. The chairman shall be elected by the committee under such rules as the committee may formulate. Members may be removed for cause on the affirmative vote of seven members of the executive board. The treasurer of the society shall be ex officio treasurer of the committee, and the secretary of the society the secretary. Money appropriations for the use of the committee made by the society, or monies coming into the committee's hands during the course of its work, shall be subject to expenditures by the committee under such rules as it may adopt. The committee shall have full charge of all matters relating to exhibitions held by or on behalf of the society, or under its auspices, excepting the trade exhibition at the annual convention, subject to the control of the executive board; and shall control the offering and awarding of medals, trophies and certificates. The members of the committee shall be reimbursed for traveling expenses, when traveling on business of the committee under call of the chairman. The committee shall make a full report to the executive board each year on August 1st.

An amendment which promises to arouse considerable discussion concerns the selection of the next convention city. The amendment would do away with the system now in vogue of selecting this city two years in advance. The amendment reads as follows:

At the thirty-sixth annual meeting to be held August 17 to 19 in Cleveland, Ohio, the meeting place for the year 1921 shall be selected by ballot, and at every annual meeting thereafter the meeting place for the following year shall be so selected, covering dates, equivalent to the third Tuesday in August and two following days, or until all business is completed, except in cases when the convention is to be held in such sections of the United States where the month of August is not considered the best time for the convention. A change in date will not be considered, however, unless a petition is sent, by the convention city chosen, in time for consideration at

the mid-Lent meeting of the executive board, and setting forth its reasons for such change in date.

The executive board has recommended that the sum of \$5,000 be appropriated to the Publicity Campaign Fund to be used only if needed during the year's campaign. This recommendation is also to be voted upon at the convention.

Altogether there is every reason to expect a most important and satisfactory series of meetings.

BOSTON'S DETROIT PARTY.

The Boston party will leave Sunday night, taking the boat from Buffalo Monday night. The personnel of the party who will go are as follows:



President J. F. Ammann

E. Allan Peirce, A. W. Peirce, Louis Reuter, Waltham; J. Fuller, Leominster; J. Frank Edgar, Mr. and Mrs. Herman Bartsch, Waverly; John J. O'Brien, Boston; William Sim, Cliftondale; Miss M. E. McGinagle, Portland, Me.

B. A. Snyder is going over the road and will pick up some friends at Utica, N. Y. W. D. Howard and wife, of Milford, Mass., are also planning to drive in their machine.

FLORISTS' HAIL ASSOCIATION.

The annual reports of the Florists' Hail Association of America contains much very interesting information. The summary given by the secretary is as follows:

The totals are equivalent to an insurance of 45,131,271 sq. ft. of glass.

The number of members at date of closing this report is 1,604.

The total receipts for the year end-

ing Aug. 1, 1919, and including last year's balance, as per treasurer's report, were \$70,860.79.

The total expenditures, as per treasurer's report, for the year ending Aug. 1, 1919, have been \$39,648.27.

The cash balance on hand is \$31,212.52 of which \$875.79 belongs to the reserve fund.

The reserve fund now amounts to \$47,875.79, of which \$47,000 is invested in Liberty and Municipal bonds, together with \$875.79 in the hands of the treasurer.

The amount of interest collected on bank deposits for year is \$351.77.

The amount of interest collected on reserve fund investments is \$2,370.60.

Over twenty-eight hundred losses have been adjusted since the organization of the F. H. A., involving a total expenditure of over \$465,000.00.

An equivalent of 201,819 sq. ft. of single thick glass was broken by hail during the past year, for which the association paid \$10,090.93. An equivalent of 240,914 sq. ft. of double thick glass was broken which cost the association \$16,863.98.

At the close of this report there are unadjusted losses not exceeding \$1,300.00.

There has been a large accession this year to the hazardous risk class, which will be materially felt in the thirty-second assessment.

There has also been a large return of former members who have had a melancholy experience with cyclone insurance, that failed to insure.

The members of the F. H. A. are to be congratulated upon the condition of the treasury of the association and also upon the benefits derived from the wisdom of those who devised an automatic hazardous risk plan which is just and equitable to all.

To emerge from war conditions with the report given, is little less than wonderful and your secretary is pleased to report that the outlook is good for a largely increased business in the future.

JOHN G. ESLER, *Secretary.*

The officers of the association are: E. G. Hill, Richmond, Ind., president; J. F. Ammann, Edwardsville, Ill., vice-president; James W. Heacock, Wyncote, Pa., treasurer; John G. Esler, Saddle River, N. J., secretary. Directors, Chas. P. Mueller, Wichita, Kan., Fred Burki, Gibsonia, Pa., F. C. W. Brown, Cleveland, O., J. S. Wilson, Des Moines, Iowa, J. C. Vaughan, Chicago, Ill., John J. Hess, Omaha, Neb., E. G. Hill, Richmond, Ind., J. F. Ammann, Edwardsville, Ill., Samuel Murray, Kansas City, Mo., Julius Roehrs, Rutherford, N. J.

ROSE GROWING UNDER GLASS

By ARTHUR RUZICKA

With plenty of rain here in the Eastern States and more foggy weather in between for a change, growers will have to take every precaution to prevent spot from setting in, and we must see that lime is blown around underneath the plants every evening following a watering or syringing. Also on rainy days when the air is overcharged with moisture. In the latter case it is better to blow the lime into the air over the walks filling the house up completely with dust. This dust is perfectly dry, will absorb much moisture in the air and bring it down as it settles, leaving the atmosphere dry and sweet, and this is what roses want. Use air slacked dry lime or else hydrated lime, being a little more careful with the latter when it comes to handling it as it is very caustic and is likely to make sores of any scratches, etc., on the hands. Screen the lime through a fine screen and then apply with a good pair of bellows. When blowing lime under the plants use a little judgment and do not work the bellows too hard. Pump the bellows only hard enough to blow the lime underneath the plants and then let the dust rise among them slowly.

Tying Beauties.

Although it will do the plants good to lay around a while untied after planting they should not be let go too long with the weather we have been having, for spot will almost surely start in. In standard benches where four rows of plants are planted use fine wires and distribute the growth along these as evenly as possible. Begin bending the plants to the north, northeast or northwest in houses running east and west. But lean them over a bit anyhow, they will break better from the bottom and much stronger.

There will also be more breaks next spring and during the winter. Before doing any tying see that the wires are properly stretched and braces made strong to hold the second and third tiers of wires, place the first set about 12 inches above the level of the soil in the benches, it can be put two inches lower if it will not interfere with working the surface of the soil, the nearer it is the roots the better as the plants will not have to draw the sap through so much hard wood to the buds. However, it should not be down lower than ten inches above the soil,

for then there would be but little chance for any air to circulate under the plants and various diseases would be very apt to set in. When tying be sure to place string around the wire once before tying the knot so that the plants will not slip and slide around when they are syringed. Use string rather than raffia for the first tying, the plants will stay tied better, and do not tie the knots too tight so as not to choke the plants when the wood swells.

The Manure Heap.

Do not neglect to keep piling manure as fast as it can be handled. It is absolutely necessary to have plenty of good manure on hand all the time, and the only way to accomplish this is to have a good supply continually coming in, piling it in fresh heaps all the time and forking these over as they slowly decay, if at all possible make a concrete platform with a shed over it, drawing into a tank from which the liquid can be used to water with or can be pumped over the manure when same gets dry and begins to heat. With bonemeal, tankage, sheep manure and all such plant foods way up in price it will pay growers to take care of all the manure laying around the place, for here good dollars can go on slipping away unnoticed.

Seeding New Sod.

As time goes on more and more growers realize that it is necessary they sod in order to insure a good supply of the right kind of soil. The best way to get a good sod is to lay off your fields into plots large enough to supply your needs for one season, and then begin in the spring and manure one heavily and plow it.

Then as weeds appear it can be manured with horse manure again and plowed once more, a little deeper this time. Then continue to plow and harrow until August and if weather permits sow to a good mixture of hay clover and timothy for horses and clover and orchard grass for cows, or sow a permanent pasture mixture, although the first two named will make the richest sod. Use both red and white clover, and do not be afraid of using too much of it. It should come up almost weedless, and will yield a nice crop of hay the following summer. Then top dress with a little lime in the winter at any time, and use a little bone in the spring, after that an-

other crop can be cut the second summer and the sod stripped off that fall.

By adding the usual amount of cow manure and bone meal to sod like this roses will grow without any limit of trouble because of poor soil. Needless to say the land in question should be well drained, and all manure and fertilizer applied should be applied as evenly as it is possible to get them, also the plots should be as near the greenhouses as possible so as not to add too much to the expense of putting up sod, because of long distance hauling.

PHILADELPHIA.

The cut flower market was rather slow last week and there was a large amount of low quality stock sent in by the growers. The consequence was that most of it went to the street boys for next to nothing, and a great deal of it hardly paid the expressage. This was especially the cases with asters and gladioli. Among roses the good ones went at very fair prices; but there were too many shorts among these also. Russell headed the list and was really very good for the season. No carnations to be seen. Among the asters, the variety *Astermum* seems to be a favorite.

J. Otto Thilow of Dreer's is rustivating at Saranac Lake. Between meals we presume he fraternizes, and perchance sometimes goes on the water to give the fish a lecture. If the bait is as catching as he gives us humans on the lecture platform, the high cost of living will sure be a negligible quantity in the vicinity of Saranac.

MODEL NURSERY PLANNED

The Eastern States exposition will have a model nursery on its grounds during the entire week of its big stock and agricultural show, September 15 to 20. Trees will represent practically all varieties of timber grown in any quantity in Massachusetts, and will compose the major part of the state forestry department's reforestation exhibit. Technically trained tree men will be on duty all week to show visitors how little trees are grown from seeds and how whole timber forests can be made to cover waste areas.

The nursery, however, will be only one department of the forestry show which, according to State Forester F. W. Rane, promises to be the largest ever assembled by the department. Large transparencies showing model forests, economical cutting methods, blight cure systems in operation and other modern forestry processes will also be part of the exhibit.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

Charles Dudley Warner, a sort of modern Epicurus, once wrote that woman always did from the first make a muss in the garden. If Mr. Warner had made any such statement at the present time he would have brought the house down around his ears, for women are taking a most important part in garden matters, and no one can say that gardens are any poorer in character as a result. Mr. Warner, who was a Hartford man, would no doubt have had Mrs. Mabel Osgood Wright from Fairfield over in short order to remonstrate with him. It would have taken only a short time for the former Mrs. Ely to appear on the scene and perhaps Mrs. Wilder would also have come along to help administer, condign punishment to the erring editor. It is even possible that Mrs. Francis King would have taken sufficient umbrage to have come on from the middle west to assist in the ceremony of ducking the good newspaper man in the horse trough.

Certain it is that the gardens of America as well as those of England owe a great deal to the work which is being done by very competent successful and enterprising women. If garden making on the part of the amateur is to be put on the high plane which it deserves to occupy in this country, that result will be brought about largely through the efforts of women garden lovers.

One of the best indications of progress is shown by a constantly increasing number of garden clubs made up of women which are being organized. I have had the pleasure the past few months of speaking before some of these clubs, and have been surprised, not only at the keen interest shown in gardens, but also in the wide knowledge of plants, planting methods and particularly in color arrangement shown. If I have been able to impart any knowledge, I certainly have gained considerable at the same time.

It seems that members of these

clubs are often forming parties for visiting various well planned gardens where they can learn by actual observation. In one instance the members have had the services of a competent guide who has conducted them through one of the best gardens in southern New England at different times in the summer, answering questions and giving a practical talk about the various plants in flower at the time. I found the members of another garden club having photographs made of the best examples on their own places and these photographs being prepared as lantern slides to be shown by a lantern which the club has purchased.

It is pleasing to find that these gardening women are not confining their work wholly to the outdoors, either, but are planning methods by which instruction and help can be given to the public at shows and exhibitions.

The suggestion that demonstrations be given at the shows under the direction of some skilled grower is meeting with much approval. It is already hinted that there will be some unusual developments at exhibitions to be held within the next year. One of them is likely to take the form of a demonstration to show how to use the common flowers to best advantage in table decoration. It is not a new thing for florists to decorate tables for prizes, but the florists' method is almost certain to be quite different from that which the average housewife would adopt. Moreover, he is likely to use a different class of flowers. And quite possibly, too, the florist can learn something from women who have acquired skill and knowledge through experiments and practice lasting over many years. At any rate, something of this kind should prove a tremendously attractive feature to the general public, especially if the work of arranging the tables can be described while it is being done and comments made by those who are competent to criticize or offer suggestions.

Considerable has been said in HORTICULTURE during the past few months about the catalogues of the nurserymen and the statement has been made, I think, that very few departures have been made from methods in vogue

years ago. It is interesting, therefore, to note that some nurserymen and dealers are getting away from the conventional type of catalogue, and presenting something entirely new. It may be that this is the beginning of a new era in catalogue making. Possibly some of the experiments will not work out as expected. It doesn't necessarily follow that a thing is good because it is new. Still it is refreshing to find dealers who are willing to strike out in a new direction.

These remarks are inspired by the fact that I have just received a new catalogue from Maurice Fuld. It isn't a big catalogue or a pretentious one by any means, but it certainly is different from any other ever seen. Moreover, it is well printed and makes a strong appeal to the eye, even though it is minus all illustrations. Mr. Fuld has arranged the pages by months, and under each heading tells what should be planted in August, and in September, afterwards in October, and so on through the fall. In various other ways he has made up a little book which will appeal to the amateur, at least as being of real help by grouping plants and flowers in such a way that his work of making a selection and placing an order is reduced to a minimum.

Very likely plenty of criticism can be made of Mr. Fuld's little catalogue, but at any rate a new note has been struck, and it is safe to say that a decided change in the appearance of the nurserymen and seedsmen's catalogues in general will be noted during the next few years. It is bound to come, and horticulture as a whole will be better for the change.

TO PREVENT HOLLYHOCK RUST.

Editor of HORTICULTURE, Boston, Mass.

Dear Sir: While referring to some back numbers of HORTICULTURE I noted on Page 423 of the issue dated May 3, 1919, an inquiry by "Novice," as to remedy for rust of Hollyhocks and what you have to say in answer to the inquiry.

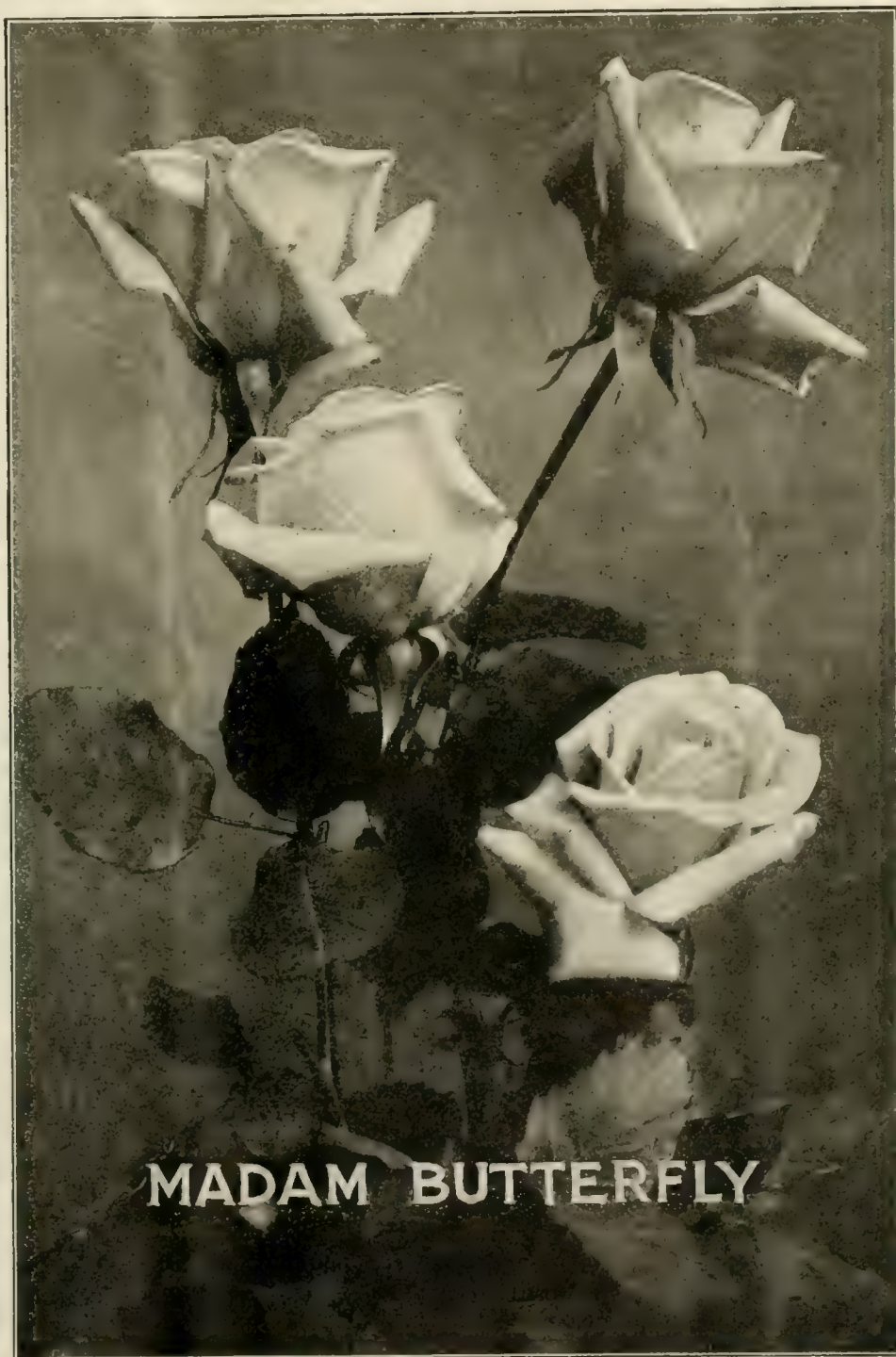
Another preventive (not a cure) of the rust on hollyhocks and phlox is as follows and I think will be found quite effective.

Obtain a saturated solution of permanganate of potash and make a spray in the proportion of a large teaspoon of this solution to one quart of water.

Apply to both sides of the leaves with a fine mist once or twice a week after the leaves appear until the end of the season.

FRANK J. MCGREGOR.
Newburyport, Mass.

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This is the Advance Convention Number of HORTICULTURE and indicates that the Convention is to be a largely attended and most successful event. The regular Convention Number next week will be full of interesting and important material for the trade.

Stage all set

The stage is set for the convention of the S. A. F. & O. H. at Detroit next week. Apparently this is going to be a big convention, and one of no little importance. All the conventions are important, for that matter, as any gathering must be when the most active and wide-awake members of the trade from all parts of the country get together for discussion and mutual help. Several matters are to come up at Detroit, however, which will make the occasion one of special interest. Moreover, Detroit is a first-class convention city, filled with hospitable people, and there is no doubt whatever but that the social features will be given so much importance that that end of the convention will remain a pleasant memory for many years.

As the time when the convention is to open draws near, many members of the trade who had at first decided not to go are changing their minds. They are beginning to realize that this is to be a convention which they cannot afford to miss and one at which perhaps their counsel will be needed. This applies particularly to some of the older members of the organization.

An excellent program has been prepared, although it seems distinctly unfortunate that Dr. Marlatt should have been included. Judging from the character of some of the men who will attend the meetings, Dr. Marlatt's statements will not go wholly unchallenged. Still it is difficult to see where much good can be accomplished by a discussion of the famous Quarantine No. 37 at this time when the lid has been clamped on and seems likely to stay clamped unless Congress takes a hand in lifting it.

As it is the first convention of the kind since the war, the attendance will probably be unusually large. Moreover, there will be a marked tendency to seek out all that is new and which will make for the betterment of business methods or greater convenience in greenhouse operations. It is to be expected, therefore, that the

trade exhibit will be of special value and excite more than usual interest. Such an opportunity to get acquainted with the most up-to-date and improved appliances and the most recent methods is one not to be overlooked by ambitious and enterprising members of the trade.

Finally there is the getting together of old friends from all parts of the country—men who seldom see each other except on the occasion of these annual events, but whose friendship does not wax nor wane on that account. Altogether, the convention of 1919 promises to be one of the best in the long and honorable history of the S. A. F.

Toronto convention

The convention of the Canadian Horticultural Association is being held at Toronto this week, and a number of men representing the trade in the United States are in attendance. At least six of the big supply firms of this country are also represented. An excellent program is being carried out and a discussion is being held as to the advisability of forming a Dominion Retail Florists' Association to further the interests of the retailers in Canada. The result of this discussion will be learned with interest on this side of the line, where organizations of local retailers have proved of great value. Reports from the Toronto convention will be worth reading.

Gardeners' convention

One subject which is likely to receive considerable attention at the coming convention of gardeners at Cleveland will be that of educating young men for the duties of an expert gardener. With war time conditions and the lure of high wages in industrial lines, the number of young men turning to horticulture has been distressingly small. The lack of expert labor and especially of interested labor is being felt on estates and in greenhouse establishments everywhere. Many of the colleges and other institutions are offering courses in horticultural subjects and the attendance seems to be good. After all, though, no system of education by the book can take the place of practical work under the eye of a trained and experienced man. Doubtless some sort of solution will eventually be devised and possibly it will be presented at the Cleveland meeting. It should not be supposed, though, that the difficulty is one which is peculiar to this country. According to reports from abroad the same situation is being encountered across the water and in some places the lack of good men seems very acute. The following excerpt from the Horticultural Trade Journal is especially interesting in this connection:

"Another matter that demands the serious attention of the trade is the reinforcement of the ranks of really skilled and clever craftsmen which as in every other sphere, have been sadly drained whilst the normal influx of beginners has been arrested. Depleted stocks of trees, and plants cannot be replenished without skilled propagators, and the selection and improvement of seed-stocks demands the work of carefully trained hands. I venture the opinion that the revival of the apprenticeship system in nurseries and gardens would prove to be of far more real value than the development of training colleges and institutes of scientific horticulture and if the proprietors of nurseries will adopt the principle of giving their employes a tangible interest in the development and prosperity of their business the results will be greater and more beneficial than any form of trade unionism for garden workers can be."

THE GARDENER'S SECTION

ROBT. CAMERON LEAVES HARVARD BOTANICAL GARDENS.

It will seem unusual to visit the Harvard Botanical Gardens in Cambridge and not find Robert Cameron there. Mr. Cameron, however, has resigned his position, after being at the gardens for thirty-one years. On the first of September he will take a new position as manager of the Crane estate at Ipswich, Mass. This estate, which is known as Castle Hill Farm, is one of the largest in New England, although it is not very well known. The grounds cover nearly 2,500 acres, and an immense amount of money has been spent on the place. The swim-



Robert Cameron

ming pool alone is said to have cost more than \$100,000. There is an elaborate rose garden and a large Italian garden. A considerable amount of farming is done, and the farm buildings are of the most up-to-date character. The place is comparatively new and when it was established there were no trees upon it. Now, however, it contains a great number of valuable evergreens, as well as unusual plantings of white birches.

It is expected that the estate will be much further developed under the direction of Mr. Cameron, whose skill and knowledge are well known. For years Mr. Cameron has been a prominent and valuable member of The Gardeners' and Florists' Club of Boston, and of other organizations.

His successor at the Botanical Gardens will be Mr. Joseph Reardon who for the last two or three years has been an assistant to Mr. Cameron.

Mr. Reardon is a graduate of Kew Gardens and has had much valuable experience to fit him for the post which he is now to occupy.

This is one of the most important changes in the gardening fraternity which has been recorded this season.

A FINE SHOW AT BOSTON.

The gladiolus and phlox show at Horticultural Hall, Boston, on Saturday and Sunday was one of the best that the society has given for many years. The attendance was large and the show was a distinct success in every way. Florists were especially interested in the new Lily White, one of Kunderd's productions and the stock of which was recently purchased by H. E. Meader, of Dover, N. H., for \$3,000. Mr. Meader was on hand to arrange his exhibit. Lily White is an ideal gladioli for florists' use and is said to force well. It is likely to be in great demand in a few years.

B. Hammond Tracy of Wenham, Mass., had a splendid collection of primulinus hybrids, the delicate beauty of which attracted much attention.

John K. Alexander of East Bridge-water had an extensive display. Mrs. John Hays Hammond, one of his latest seedlings was shown for the first time.

Much attention was attracted by the exhibition of cut flowers staged by the Boston Cut Flower Co. This exhibit was arranged with great skill by Mr. W. Rosenthal.

Phlox was not shown extensively, but Mr. Smith of Wellesley had a good display. W. N. Craig of Faulkner Farm, who can always be depended on, had an exhibit of flowers, fruits and vegetables. Miss Case of Hillcrest Farm, Weston, also exhibited vegetables and fruits.

The list of prizes and gratuities awarded follows:

Awards for Flowers.

John Allen French Fund.—Perennial Phloxes: 12 named varieties, one truss of each: 1st, G. N. Smith; six trusses, one variety: 1st, G. N. Smith. Gladioli—6 vases, 6 varieties, one spike each, white: 1st, A. L. Stephen; 6 vases, 6 varieties, pink: 1st, A. L. Stephen; 2d, E. M. Powers; 6 vases, 6 varieties, red: 1st, A. L. Stephen; 6 vases, 6 varieties, yellow: 1st, A. L. Stephen; 2d, Faulkner Farm; 6 vases, 6 varieties, lavender or mauve: 1st, A. L. Stephen; 6 spikes any Primulinus Hybrid: 1st, Faulkner Farm; 2d, Faulkner Farm. Best seedling Gladiolus, one spike: E. M. Brewer. (Commercial growers excluded from all classes of Gladioli.)

Silver Medal: S. E. Spencer, display of Gladioli; H. E. Meader, display of Gladioli; Boston Cut Flower Co., arrangement of Gladioli in baskets and vases.

Bronze Medal: J. K. Alexander, display of Gladioli, Phlox and Dahlias.

First Class Certificate of Merit: A. E. Kunderd, Gladiolus Primulinus "Salmon Beauty," Gladiolus "Peach Rose"; Eugene N. Fischer, seedling Gladiolus "Mrs. Frederick C. Peters"; H. E. Meader, seedling Gladiolus "Lilac Royal."

Cultural Certificate: S. E. Spencer, display of Gladioli; A. L. Stephen, table of Gladioli.

Honorable Mention: Thomas M. Proctor, Gladioli; Cedar Acres (B. Hammond Tracy), display of Gladiolus Primulinus; Eugene N. Fischer, seedling Gladiolus "Henry C. Goehl," and Gladiolus Primulinus Seedling "Red Start"; C. W. Brown, seedling Gladiolus No. 1730 D, and seedling Gladiolus No. 1716 D; S. E. Spencer, Gladiolus seedlings No. 102 and No. 885.

Vote of Thanks: H. W. Hayes, vase of Gladioli; A. E. Kunderd, display of Gladioli; G. N. Smith, display of Phlox.

Awards for Fruits.

Benjamin V. French Fund, No. 2.—Collection of Summer Apples, 3 varieties, 12 specimens each: 1st, Hillcrest Farm; 12 specimens, any variety: 1st, Hillcrest Farm, Sweet Bough. Peaches—3 varieties, 12 specimens each: 1st, Hillcrest Farm; 2d, Parker Bros. One variety, 12 specimens: 1st, Hillcrest Farm, Greensboro; 2d, Hillcrest Farm, Mayflower. Pears—12 specimens, any variety: 1st, Mrs. Elbridge Torrey, Clapp's Favorite; 2d, Mrs. R. Goodnough, Clapp's Favorite. Plums—4 varieties, 12 specimens each: 1st, Faulkner Farm. One variety, 12 specimens: 1st, Faulkner Farm, Belgian Purple; 2d, Mrs. R. Goodnough. Abundance. Blackberries—48 berries, any variety: 1st, E. A. Clark, Agawam. Blueberries—100 berries: 1st, James A. Neal.

Gratuity: Faulkner Farm, exhibit of peaches on branches.

Awards for Vegetables

Benjamin V. French Fund, No. 2.—Beans—Horticultural, 50 pods: 1st, Hillcrest Farm. Lima, 50 pods: 1st and 2d, Hillcrest Farm. Egg Plant—4 specimens, any variety: 1st, Hillcrest Farm; 2d, E. A. Clark. Onions—12 specimens, any variety: 1st, James A. Neal; 2d, E. A. Clark. Peppers—12 specimens, any variety: 1st, F. W. Dahl. Squash—Marrow, 3 specimens: 1st, James A. Neal. Sweet Corn—12 ears, any variety: 1st, E. A. Clark; 2d, Hillcrest Farm. Tomatoes—12 specimens, any variety: 1st, James A. Neal; 2d, Faulkner Farm. Collection of Vegetables—12 varieties, arranged for effect: 1st, Hillcrest Farm. Six varieties, arranged for effect: 1st, James A. Neal.

Gratuities: Hillcrest Farm, collection of potatoes; E. A. Clark, Crook neck Squash.

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Batavia Greenhouse Co.
- BATAVIA, N. Y.**
L. C. Stroh & Sons.
- BATON ROUGE, LA.**
The Roseland Florist, Mr. Sam Scheiunk.
- BATTLE CREEK, MICH.**
S. W. Coggan, 25 E. Main St.
B. W. Kribs, 41 N. Jefferson Ave.
- BAY CITY, MICH.**
Boehringer Bros., 316 Jefferson St.
- BEATRICE, NEB.**
Dole Floral Co., 518 Ella St.
- BEAVER, PA.**
Thomas M. Fitzgerald, 964 6th St.
- BEAVER FALLS, PA.**
The Flower Shop, 1308 7th Ave.
- BEDFORD, IND.**
Williams Floral Co., 8th and O Sts.
- BELLEFONTAINE, OHIO.**
Stelzig's Floral Store, 127 S. Main St.
- BELLEVUE, OHIO.**
Mrs. Nellie Zeigler, 209 E. Main St.
- BELLOWS FALLS, VT.**
Geo. A. Halladay, 6 Webb Terrace.
- BELOIT, KANS.**
Mrs. E. L. Bell, S. Mill St.
- BELVIDERE, ILL.**
J. P. Herzog, 219 S. State St.
- BENTON HARBOR, MICH.**
Princess Flower Shop, 197 E. Main St.
- BERKELEY, CAL.**
Wm. F. Norton, 2227 Shattuck St.
Pacific Floral Co., 2109 University Ave.
- BERWICK, PA.**
D. W. Davis, 121 W. Front St.
- BETHLEHEM, PA.**
Foulsham, The Florist, 419 Wyandotte St.
Charles Vorkeller, 817 Seneca St.
Sawyer & Johnson, Laurel St.
- BEVERLY, MASS.**
Beverly Flower Shop, 296 Cabot St.
- BIDDEFORD, ME.**
Strout's, 317 Alfred St.
- BIG RAPIDS, MICH.**
Star Greenhouse, 149 S. 3rd Ave.
- BILLINGS, MONT.**
Parington's Greenhouses.
- BINGHAMTON, N. Y.**
Binghamton, Florist, 63 Court St.
A. E. Fancher, 6-10 Bigelow St.
The Flower Shop, 68 Chenango St.
- BIRMINGHAM, ALA.**
Empire Flower Store.
Frazer Nursery Co.
- BISMARCK, N. D.**
Hoskins Floral Co., 200 4th Ave.
- BLOOMINGTON, ILL.**
A. Washburn & Sons, 318 Main St.
Morris, The Florist.
- BLOOMSBURG, PA.**
J. L. Dillon, Fifth St.
- BLUFFTON, IND.**
Myers & Co., Wabash Ave.
- BOONE, IOWA.**
Kemble & Smith Co.
- BOONTON, N. J.**
Herrick, 502 Main St.
- BOSTON, MASS.**
Caplan Florist, 144 Massachusetts Ave.
Carbone, Inc., 342 Boylston St.
John J. Cassidy, 6 Beacon St.
Thos. F. Galvin, Inc., 1 Park St.
John J. O'Brien, 67 Beacon St.
Henry Penn, 124 Tremont St.
Wax Brothers, 143 Tremont St.
- BOULDER, COLO.**
The N. Boulder Greenhouses, 2648 12th St.
- BOWLING GREEN, KY.**
Burdell Floral Co., 861 Fairview Ave.
- BOZEMAN, MONT.**
M. Langohr, 315 S. Tracy St.
- BRADDOCK, PA.**
J. M. Johnston, 621 Braddock Ave.
- BRADFORD, PA.**
C. E. Guntton.
Wm. N. Graham, 91 Main St.
- BRAINTREE, MASS.**
Herman Waldecker, 37 Sampson Ave.
- BRANTFORD, ONT.**
The Rosery, 88 Dalhousie St.
- BRATTLEBORO, VT.**
Hopkins The Florist, 118 Main St.
- BRAZIL, IND.**
Dinkel Flower Shop, 25 W. Walnut St.
- BRIDGEPORT, CONN.**
John Reck & Son, cor. Main and Golden Hill.
James Horan & Son, 943 Main St.
- BRISTOL, CONN.**
Andrew Brothers, 19 Maple St.
Paul M. Hubbard & Co., 184 Main St.
- BRISTOL, PA.**
J. C. Schmidt, Otter and Maple Sts.
- BROCKTON, MASS.**
Belmont Flower Shops, 25 Belmont Ave.
Wm. W. Hathaway, 9 Main St.
- BROOKLINE, MASS.**
F. E. Palmer, Inc., 220 Washington St.
- BROOKLYN, N. Y.**
John V. Phillips, 272 Fulton St.; 7 Clinton St.
J. Ebb Weir & Co., Inc., cor. 5th & 25th.
Robert G. Wilson, 3-5 Greene Ave.
Joseph Trepel, Lewis Ave. & Hancock St.
- BROWNWOOD, TEXAS.**
Brownwood Floral Co., cor. W. Baker and Booker Sts.
- BRYN MAWR, PA.**
John J. Connolly Est., 1226 Lancaster Pike.
Jeannett's Bryn Mawr Flower Shop, 807 Lancaster Pike.
- BUCHYRUS, OHIO.**
F. J. Norton, Spring Charles and Kaler Aves.
- BUFFALO, N. Y.**
S. A. Anderson, 440 Main St.
L. H. Neubeck, Main and High Sts.
W. J. Palmer & Son, 304 Main St.
Stroh's, 379 Main St.
Wm. H. Grever, 77 Allen St.
Scott, The Florist, Main and Balcom Sts.
Colonial Flower Shop, 219 Delaware Ave.
- BURLINGTON, IOWA.**
Bock's Flower Shop, 322 N. Third St.

- BURLINGTON, VT.**
Mrs. Cora E. Gove, 184 Main St.
W. E. Peters, 128 Church St.
- BUTLER, PA.**
A. Krut Floral Co., Inc., 328 S. Main St.
- BUTTE, MONT.**
Butte Floral Co., 27 W. Broadway.
Columbia Floral Co., 47 W. Broadway.
- CAIRO, ILL.**
Cade, The Florist, 228 8th St.
- CALGARY, ALBERTA.**
Emery Floral Co., Ltd.
A. M. Terrill, Ltd.
- CAMBRIDGE, MASS.**
Becker's Conservatories, 1730 Cambridge.
Harold A. Ryan, Inc., 581 Mt. Auburn St.
Robbins Brothers, 636 Massachusetts Ave.
- CAMBRIDGE, OHIO.**
Fred W. Arnold, 915 Wheeling Ave.
- CAMDEN, N. J.**
James M. Thoires, 524 Market St.
- CANAJOHARIE, N. Y.**
Joseph Traudt.
- CANANDAIGUA, N. Y.**
Edward Sick, 305 S. Main St.
- CANTON, ILL.**
Geo. W. Jacobs, 720 E. Elm St.
- CANTON, OHIO.**
J. Rollin Cowgill, 306 Tuscarawas St., W.
Fred G. Geltz, 522 N. Market St.
- CARBONDALE, PA.**
Wade's Flower Shop, 11 S. Main St.
- CAREY, OHIO.**
The Carey Greenhouses, 131 N. Lake St.
- CARLISLE, PA.**
Jesse Robbins, 36 Ridge St.
- CARTHAGE, MO.**
Guy Tadiok, 428 Clevenger St.
- CASPER, WYO.**
Casper Floral Co.
- CATSKILL, N. Y.**
Henry Hansen, Clinton Ave. & Spring St.
- CEDAR FALLS, IOWA.**
Joseph Bancroft & Son.
- CEDAR RAPIDS, IOWA.**
I. N. Kramer & Son.
John E. Lapes, 308 Third Ave. E.
- CELINA, MERCER COUNTY, OHIO.**
J. A. Ernsberger, N. Mill St.
- CENTERVILLE, IOWA.**
Kemble Floral Co.
- CENTRALIA, ILL.**
J. W. Ross.
Webster's Greenhouses, Locust & E. 4th.
- CHAGRIN FALLS, OHIO.**
Wycoff Floral Co., 7. Washington St.
- CHAMBERSBURG, PA.**
Byer Bros.
- CHAMPAIGN, ILL.**
Thomas Franks & Son, 112 N. Neil St.
- CHARLESTON, ILL.**
Bertha B. Newby, 713 N. 7th St.
- CHARLESTON, S. C.**
Carolina Floral Store, King & George Sts.
T. T. Bolger, 88 Society St.
Rodgers Floral Co., 174 Tradd St.
- CHARLESTON, W. VA.**
Charleston Cut Flower & Plant Co. 19 Capitol Ave.
Winter Floral Co., 811 Quarrier St.
- CHARLOTTE, MICH.**
R. A. Wietzke, 620 W. Harris Ave.
- CHARLOTTE, N. C.**
Scholtz The Florist, Inc., 306 N. Tryon St.
The Flower Shop, 203 N. Tryon St.
- CHARLOTTESVILLE, VA.**
Lankford's Flower Shop, 101 W. Main St.
- CHATHAM, ONT.**
W. McK. Ross Sons, 119 W. King St.
- CHATTANOOGA, TENN.**
W. F. Haeger, 700 Market St.
Joys, 721 Market St.
- CHEYENNE, WYO.**
Underwood Flower Shop, 122 W. 17th St.
- CHICAGO, ILL.**
Alpha Floral Co., 146 S. Wabash Ave.
Bohannon Floral Co., 57 E. Monroe St.
H. N. Bruns, 3040 W. Madison St.
Fleischman Floral Co., 84 E. Jackson Bldg.
Oscar B. Friedman, 516 E. Mich. Ave.
August Lange, 71 E. Madison St.
Lewis & Rocca, 55 E. Jackson Bldg.
Mangel, The Florist, 17 E. Monroe St.
Chas. T. Neiglick, 834 N. State St.
Samuelson, 2132 Michigan Ave.
Schiller The Florist, 2221 W. Madison St.
Also 1509 Broadway.
W. J. Smyth, 3102 Michigan Ave.
Ernest Wienhoeber Co., 22 E. Elm St.
- CHICAGO HEIGHTS, ILL.**
H. J. Peterson, 6 W. 21st St.
- CHICKASHA, OKLA.**
Mrs. Stella Johnston, 628 Fifth St.
- CHICOPEE, MASS.**
William Paul, 62 Grape St.
- CHILLICOTHE, MO.**
R. L. Isherwood.
- CHILLICOTHE, OHIO.**
Elsass Flower Shop, 52 E. Main St.
- CINCINNATI, OHIO.**
Julius Baer, 138 E. 4th St.
Edward A. Forter, 128 W. 4th St.
- T. W. Hardesty & Co., 150 E. 4th St.**
H. W. Shepherd, 532 Race St.
Walnut Hills Floral Bazaar, C. J. Jones.
Proprietor, 1037 E. McMillan St.
Trone's Flower Shop, 931 Vine St.
- CLARKSBURG, W. VA.**
J. W. Dudley Sons Co., Waldo Hotel Bldg.
Hayman Greenhouse Co., 111 W. Main St.
The H. Weber Sons Co., Gore Bldg., Pike.
- CLARKSVILLE, TENN.**
Joy's.
- CLEARFIELD, PA.**
Mrs. Wm. Blacker, 19 3rd St.
- CLEVELAND, OHIO.**
J. M. Gasser Co., 1006 Euclid Ave.
Paul C. Hahn, 10515 Superior St.
A. Graham & Son, 5523 Euclid Ave.
The Jones-Russell Co., 1281 Euclid Ave.
John T. Kirchner, 67th and Quincy Sts.
Knoble Bros., 1836 W. 25th St.
Westman & Getz, 5233 Euclid Ave.
G. W. Mercer, 2391 W. 25th St.
- CLINTON SPRINGS, N. Y.**
F. R. & J. R. Tomlinson, Kendall St.
- CLINTON, ILL.**
Grimsley's Flower Store.
- CLINTON, IOWA.**
Andrew Bather Co., 210 6th St.
- CLYDE, OHIO.**
Hall's Greenhouse, Cor. Maple & Race.
Arthur Doebel & Sons.
- COATESVILLE, PA.**
Thomas Flower Room, 247 E. Main St.
- COHOKES, N. Y.**
Ansel D. Carpenter, 59 Remsen St.
- COLDWATER, MICH.**
D. Vogt's Greenhouses.
- COLORADO SPRINGS, COLO.**
Frank F. Crump.
Pikes Peak Floral Co.
The Cheyenne Floral Co., Broadmoor Hdl.
- COLUMBUS, IND.**
Chas. S. Barnaby, 428 Fifth St.
- COLUMBUS, OHIO.**
Franklin Park Floral Co., 1335 Fair Ave.
T. J. Ludwig, 82 N. High St.
- CONCORD, N. H.**
Solon R. Baker, 28 Pleasant St.
- CONNEAUT, OHIO.**
L. A. Eaton & Sons, 225 Broad St.
- CONNELLSVILLE, PA.**
P. R. DeMuth & Sons, 111 E. Crawford Ave.
- CORNING, N. Y.**
Bacalles Flower Shop, 8 W. Market St.
- CORSICANA, TEXAS.**
Alfred Holm.
- COSHOCOTON, OHIO.**
S. M. Hamilton & Sons, 306 S. 10th St.
- COUNCIL BLUFFS, IOWA.**
J. F. Wilcox & Sons, 530 W. Broadway.
- COVINGTON, KY.**
Robert D. Ruttle, 822 Madison Ave.
- CRAWFORDSVILLE, IND.**
McDonald & Co., 126 W. Main St.
- CUMBERLAND, MD.**
John Paul, 56 N. Center St.
- DALLAS, TEXAS.**
Dallas Floral Co., H. F. Greve, Prop.,
Ross and Masten Aves.
Lang Floral & Nursery Co., 1214 Main St.
- DANIELSON, CONN.**
Franklin & Crosby, Inc., 8 Academy St.
- DANVILLE, ILL.**
Britz, The Telephone Florists, 211 S. Bowman Ave.
F. B. Smith's Sons, 101 N. Vermillion St.
- DANVILLE, PA.**
T. J. LeDue, 302 Bloom St.
- DANVILLE, VA.**
Eldridge Stores, Inc., Arcade Bldg.
- DAVENPORT, IOWA.**
Bills Floral Co., 104 W. 2nd St.
G. F. Forber, 313 Brady St.
- DAYTON, OHIO.**
The Heiss Co., 112 S. Main St.
J. W. Rodgers, 3rd and Jefferson.
Matthews, The Florist, 16-18 W. 3rd St.
- DECATUR, ILL.**
Daut Brothers, 120 E. Prairie Ave.
Peterson Floral Co., 402 Water St.
- DEFIANCE, OHIO.**
Christ Winterich, 1119 Jefferson Ave.
- DEKALB, ILL.**
J. L. Johnson, 311 E. Lincoln Highway.
- DELAWARE, OHIO.**
Jos. H. Cunningham, 325 W. William St.
- DEMING, NEW MEXICO.**
Miss L. Ironmonger, 111 N. Gold Ave.
- DENVER, COLO.**
American Flower Shop, 1017 16th St.
Geo. H. Cooper, 833 15th St.
Mauff Floral Co., 1225 Logan St.
The Park Floral Co., 1643 Broadway.
- DERBY, CONN.**
H. M. Bradley, 113 New Haven Ave.
- DES MOINES, IA.**
Alpha Floral Co., 7th and Walnut Sts.
Alfred Lozier Rosery, 317 6th St.
H. E. Lozier, 521 E. Locust St.
J. S. Wilson Floral Co., 35th and Ingersoll Aves.
- DETROIT, MICH.**
The L. Bomb Floral Co., 153 Bates St.
John Breitmeyer's Sons, 36 Broadway.
Wm. B. Brown, 13 W. Elizabeth St.
Carey, The Florist, 491 Woodward Ave.
Central Floral Co., 35 Broadway.
E. A. Fellers, 17 E. Adams Ave.
Charles H. Plumb, 1430 Burns Ave.
Scribner Floral Co., 604 E. Fort St.
J. F. Sullivan, 361 Woodward Ave.
Gust H. Taepke Co., 95 Gratiot Ave.; 450 Elmwood Ave.
- DIXON, ILL.**
Dixon Floral Co., 117 E. First St.
- DOTHAN, ALA.**
Dothan Floral Co., 134 N. Foster St.
- DOVER, N. H.**
Charles L. Howe, Floral Ave.
- DOVER, N. J.**
Herriek, Baker Theatre Annex.
- DU BOIS, PA.**
Wm. G. Jones.
- DUBUQUE, IA.**
Markets Floral Co.
- DULUTH, MINN.**
Duluth Floral Co., 121 W. Superior St.
- DUNKIRK, N. Y.**
Wm. Schwan & Son, 58 E. 4th St.
- DUNMORE, PA.**
Schultheis Florist, 317 Church St.
- DUQUESNE, PA.**
J. M. Johnston, 21 Grant Ave.
- DUQUOIN, ILL.**
William L. Thill, 730 N. Washington St.
- DURHAM, N. C.**
J. J. Fallon.
Durham Floral Co., 118 E. Main St.
- EAST CLEVELAND, OHIO.**
The Friedley Co., 14717 Shaw Ave.
- EAST LIVERPOOL, OHIO.**
The Chal. Peterson Co., Cor. 5th and Market Sts.
- EASTON, PA.**
Charles H. Buening, 1900 Lehigh St.
- EAST ORANGE, N. J.**
Henry Hornecker, 75 Central Ave.
Reichey & Lake, 373 Main St.
Geo. Smith & Sons, 557 Main St.
- EAU CLAIRE, WIS.**
A. F. T. Lauritzen.
- EDMONTON, ALBERTA, CAN.**
The Emery Floral Co.
- EDWARDSVILLE, ILL.**
J. F. Ammann Co., 1308 St. Louis St.
- ELGIN, ILL.**
George Souster, 34 Grove Ave.
- ELIZABETH, N. J.**
Henry Leahy, 1169 E. Jersey St.
- ELKHART, IND.**
West View Floral Co., 525 S. Main St.
- ELLSWORTH, ME.**
Mrs. M. A. Clark, Park St.
- ELM GROVE, W. VA.**
John Diekmann.
- ELMIRA, N. Y.**
LaFrance Florist, 100 E. Water St.
- EL PASO, TEXAS.**
Potter Floral Co., Mills Building.
- EL RENO, OKLA.**
Preston Floral Co., 207 S. Rock Island.
- ELYRIA, OHIO.**
Elyria Flower Shop, 224 Middle Ave.
Hecock Floral Co., 333 E. Broad St.
- ENGLEWOOD, N. J.**
Edw. G. Burrows, 57 Dean St.
- ERIE, PA.**
John V. Laver, 704 State St.
Miles R. Miller, 924 Peach St.
The Schluraff Floral Co., 30 W. 8th St.
- ESCANABA, MICH.**
C. Peterson & Sons, 202 S. Birch St.
- EVANSTON, ILL.**
Fischer Brothers, 614 Dempster St.
M. Weiland, 602 Davis St.
- EVANSVILLE, IND.**
The Wm. Blackman Floral Co., 522 Main St.
- EXETER, N. H.**
John R. Perkins, 23 Lincoln St.
- FAIRBURY, NEB.**
C. M. Hurlburt, Fairbury Nurseries.
- FAIRMONT, W. VA.**
Hauge Flower & Plant House, Ridgely and Floral Aves.
The H. Weber Sons Co., 118 Main St.
- FALL RIVER, MASS.**
C. Warburton & Sons, 33 N. Main St.
- FARGO, N. D.**
Shotwell Floral Co.
Smedley Floral Co., 69 Broadway.
- FAR ROCKAWAY, N. Y.**
H. Bergman, 232 Central Ave.
- FAYETTEVILLE, ARK.**
Southwestern Seed Co., 18 W. Center St.
- FAYETTEVILLE, N. C.**
Sunnyside Floral Nursery.
- FINDLAY, OHIO.**
J. J. Waaland, 140 Larkin St.
- FITCHBURG, MASS.**
Lesure, The Florist, 5 Putnam Ave.

- FITCHBURG, MASS.**
W. H. Ritter, 169 Main St.
- FLINT, MICH.**
D. P. Smith Floral Co., 201 E. Kersley St.
Hasselbring Florist, 623 S. Saginaw St.
- FLORENCE, S. C.**
DeWitt House, Palmetto Nurseries.
- FLUSHING, N. Y.**
G. P. Williams, 2 Jamaica Ave.
Ralph Hall, 2 Jamaica Ave.
- FOND DU LAC, WIS.**
The Haentze Co., 414 Linden St.
- FORT ATKINSON, WIS.**
Cloute Bros., 600 Riverside Drive.
- FORT COLLINS, COLO.**
Espelin & Warren, 111 E. Oak St.
- FORT DODGE, IA.**
Atwell Florist.
Elmer E. Nordwall, 10 S. 11th St.
- FORT MADISON, IA.**
J. M. Auge, 8th and Broadway.
- FORT MORGAN, COLO.**
Morgan Floral Co.
- FORT SMITH, ARK.**
George Rye, The Plaza.
- FORT WAYNE, IND.**
Flick Floral Co., 207 W. Berry St.
Lanternier, Florist, 1203 Calhoun St.
The Vesey's, 2602 Thompson St.
- FORT WORTH, TEXAS.**
Baker Bros. Co., Inc., 1013 Houston St.
Drumm Seed & Floral Co., 507 Houston St.
J. E. McAdam.
- POSTORIA, OHIO.**
Postoria Floral Co., 800 N. Main St.
- FRAMINGHAM, MASS.**
J. T. Butterworth, 2 Clinton St.
S. J. Goddard, 37 Main St.
- FRANKFORT, IND.**
H. O. Meikel, 358 Barner St.
- FRANKLIN, IND.**
J. E. Hitz, 290 S. Main St.
J. E. Hitz, 290 S. Jackson St.
- FREDERICK, MD.**
C. Hermann & Son.
- FREEPORT, ILL.**
John Bauscher, 104 Chicago St.
Freeport Floral Co., 83 Stephenson St.
- FREMONT, OHIO.**
Frank B. Leshner, 109 S. Front St.
- GADSDEN, ALA.**
Miss Stocks, Stocks Bldg., Chestnut St.
- GAINESVILLE, GA.**
J. E. Jackson, Prop., Piedmont Greenhouses.
- GALESBURG, ILL.**
I. L. Pillsbury, 65 E. Locust.
- GALLIPOLIS, OHIO.**
Mrs. Ed. Morgan, 415 Third Ave.
- GENEVA, N. Y.**
Trautman & Smith, 149 N. Exchange St.
- GEORGETOWN, KY.**
Alex. Hassloch.
- GIBSON CITY, ILL.**
Peterson Floral Co.
- GLENS FALLS, N. Y.**
Crandall's Flowers, 2 Harrison Ave.
- GLOVERSVILLE, N. Y.**
Peck Floral Co., 59 N. Main St.
- GOSHEN, IND.**
Colonial Flower Shop, 302 S. Main St.
- GRAND ISLAND, NEB.**
Williams, The Florist, 118 S. Locust St.
- GRAND RAPIDS, MICH.**
Arthur F. Crabb, 13 Jefferson Ave.
Eli Cross, 150 Monroe Ave.
Freyling & Mendels, 1058 Wealthy St.
Hartnett Flower Shop, 19 Park St., N. E.
Henry Smith, Monroe and Division Sts.
- GREAT BARRINGTON, MASS.**
Edward B. Dolby.
- GREAT FALLS, MONT.**
Electric City Conservatories, 1409 5th Ave., N.
Feiden's Flower Shop, 311 Central Ave.
- GREEN BAY, WIS.**
Meier-Schroeder Co., 119 N. Washington St.
- GREENFIELD, MASS.**
E. A. Richards.
- GREENCASTLE, IND.**
John Eitel & Son, Vine St.
- GREENSBORO, N. C.**
Van Lindley Co., 115 E. Elm St.
- GREENSBURG, IND.**
Ira Clark, S. Broadway.
- GREENSBURG, PA.**
Joseph Thomas, 200 N. Main St.
- GREENVILLE, OHIO.**
Frost & Spence, 748 Sweitzer St.
- GREENVILLE, PA.**
Wm. Baird & Son, 18 Rosedale Ave.
- GREENVILLE, S. C.**
Gillbreath-Durham Co., 208 S. Main St.
- GREENVILLE, TEXAS.**
Wise Adkisson, 1615 Walnut St.
- GREENWICH, CONN.**
MacMillan & Co., 323 Greenwich Ave.
- GRINNELL, IOWA.**
Kemble Floral Co.
- GUTHRIE, OKLA.**
Furrow & Co., 208 E. Oklahoma St.
- HACKENSACK, N. J.**
Alfred Whitley, 196 Main St.
- HACKETTSTOWN, N. J.**
Herrick, 404 Center St.
- HAGERSTOWN, MD.**
Henry A. Bester & Sons, 40 E. Baltimore Ave.
- HALIFAX, NOVA SCOTIA.**
Fraser Floral Co., Ltd., 24 Fenwick St.
- HAMILTON, OHIO.**
John Lodder & Sons, 161 Beckett St.
- HAMILTON, ONT.**
The "Arbor" Florist, 113 E. King St.
John Connon Co., Ltd., 69 E. King St.
- HAMMOND, IND.**
Arthur Schutz, 188 E. State St.
- HANCOCK, MICH.**
Dale & Nicholas.
- HARRISBURG, PA.**
The Berryhill Nursery and Floral Co., Locust St. at Second.
Keeney Flower Shop, 814 N. 3rd St.
F. E. Ridenour, 1221 N. 3rd St.
Charles Schmidt, 313 Market St.
- HARTFORD, CONN.**
J. Albert Brodrib, 639 Main St.
John F. Coombs, 741 Main St.
John F. Coombs, 361 Asylum St.
Geo. G. McClunie, 165 Main St.
Spear & McManus, 242 Asylum St.
Andrew W. Welch, 180 Asylum St.
- HARTFORD CITY, IND.**
R. M. Henley.
- HAVERHILL, MASS.**
Kaulbach, Florist, 28 Main St.
- HAZLETON, PA.**
Geo. H. Seidel, 231 W. Broad St.
- HELENA, ARK.**
Ball Floral Co.
- HELENA, MONT.**
State Nursery & Seed Co., 328 Fuller Ave.
- HENDERSON, KY.**
Morgan Floral Co., 1100 Second St.
- HIGHLAND PARK, ILL.**
Highland Park Greenhouses.
- HIGHLAND PARK, MICH.**
Highland Park Florist, 2571 Woodward Ave.
- HIGH POINT, N. C.**
Frank H. Ford, Willoubar Terrace.
- HILLSBORO, TEXAS.**
M. C. Wood Seed & Floral Co., Cor. Elm and Covington Sts.
- HILLSDALE, MICH.**
Otto A. Stoll, River and Spring Sts.
- HOBOKEN, N. J.**
J. Grulich & Sons, 616 Washington St.
- HOLYOKE, MASS.**
Gallivan Brothers, 500 Dwight St.
- HOMESTEAD, PA.**
J. M. Johnson, 131 E. 8th Ave.
- HOPKINSVILLE, KY.**
T. L. Metcalfe, 7th St.
- HORNELL, N. Y.**
Wettlin Floral Co.
- HOT SPRINGS, ARK.**
Johnson Floral Co., 232 Central Ave.
- HOULTON, ME.**
H. L. Chadwick, 16 High St.
- HOUSTON, TEXAS.**
Boyle & Pendervis, 721 Main St.
Paul M. Carroll, 922 Texas Ave.
R. C. Kerr, Main and McKinney.
- HUDSON, N. Y.**
Allen Greenhouses, 36 Greene St.
The Forest Flower Shop, 437 Warren St.
- HUNTINGTON, IND.**
A. G. Bieberich, 513 N. Jefferson St.
- HUNTSVILLE, ALA.**
John Scott, 5th St.
- HUTCHINSON, KANS.**
Smith's Flower Shop, 18 N. Main St.
- ILION, N. Y.**
Snell & Bronner, 101 W. Main St.
- INDEPENDENCE, KANS.**
Wm. Hasselmann, 10th and Railroad Sts.
- INDIANAPOLIS, IND.**
Bertermann Bros. Co., 241 Massachusetts Ave.
A. Weigand's Sons Co., 1610 N. Illinois St.
- IONIA, MICH.**
Byron L. Smith, 323 Lafayette St.
- IOWA CITY, IOWA.**
J. Aldonis & Son, 112 S. Dubuque St.
Prince's Flower Shop, 26 S. Clinton St.
- IRON MOUNTAIN, MICH.**
Eskils Greenhouses.
- IRONTON, OHIO.**
Weber Bros., 1501 S. 6th St.
- IRONWOOD, MICH.**
R. Lutey, Cor. Ayer and Mansfield Sts.
- ITHACA, N. Y.**
Boal Floral Co., 215 E. State St.
- JACKSON, MICH.**
J. B. Blessing, 256 E. Main St.
- JACKSON, MISS.**
Robert E. Langley, New Water Works Road.
- JACKSONVILLE, FLA.**
Mills, The Florist, Inc., 36 W. Forsythe Ave.
- JACKSONVILLE, ILL.**
Joseph Heini & Sons, 229 W. State St.
- JAMESTOWN, N. Y.**
Lakeview Rose Gardens, 304 Main St.
- JANESVILLE, WIS.**
Janesville Floral Co.
- JERSEY CITY, N. J.**
H. G. Weidemann, 222 Monticello Ave.
- JOHNSTOWN, N. Y.**
Wallager Brothers, O'Neil Ave.
- JOHNSTOWN, PA.**
T. Malbranc, 405 Main St.
- JOLIET, ILL.**
Labo Florist, Hobbs Building.
Chicago Carnation Co., 407 E. Jefferson St.
- KALAMAZOO, MICH.**
Van Bochove & Brother.
- KANE, PA.**
Kane Greenhouses, 46 Birch St.
- KANKAKEE, ILL.**
George Faber, 162 S. Washington St.
- KANSAS CITY, KANS.**
L. C. Fields, 10th and Splitlog Aves.
- KANSAS CITY, MO.**
W. J. Barnes, 38th and Euclid Aves.
Samuel Murray, 1017 Grand Ave.
Wm. L. Rock Flower Co., 1106 Grand Ave.
Arthur Newell, 1122 Grand Ave.
- KENDALLVILLE, IND.**
Johnson Floral Co., 324 Silver St.
- KENOSHA, WIS.**
L. Turner & Sons, 325 Park Ave.
- KENTON, OHIO.**
Sabransky's Floral Store, N. Detroit St.
- KEWANEE, ILL.**
C. M. Hamilton, 204 E. Third St.
- KINGSTON, N. Y.**
Valentin Burgevin's Inc., Fair and Main Sts.
- KNOXVILLE, TENN.**
Charles L. Baum, "The Home of Flowers."
Charles W. Crouch, 523 Gay St.
- KOKOMO, IND.**
Coles Flower Shop.
- LACROSSE, WIS.**
LaCrosse Floral Co.
John A. Salzer Seed Co.
- LA FAYETTE, IND.**
F. Dörner & Sons Co., 688 Main St.
- LA GRANGE, ILL.**
LaGrange Floral & Seed Co., 9 S. 5th Ave.
- LA JUNTA, COLO.**
The Valley Floral Co., 215 Colorado Ave.
- LAKE FOREST, ILL.**
Calvert Floral Co.
- LANCASTER, N. Y.**
Palmer's Greenhouses, 24 Palmer Place.
- LANCASTER, OHIO.**
W. E. Gravett, 833 E. Wheeling St.
- LANCASTER, PA.**
The B. F. Barr Co., 116 N. Queen St.
The Rosery, 30 Penn Square.
H. A. Schroyer, 146 N. Duke St.
- LANCASTER, WIS.**
Stratton's Greenhouses.
- LANSING, MICH.**
John A. Bissinger, 624 N. Capitol Ave.
Harry E. Sailer, 109 E. Ottawa St.
Smith Floral Co., 105 W. Michigan Ave.
- LA PORTE, IND.**
The Kaber Co., 812 Jefferson Ave.
- LA SALLE, ILL.**
Simmen The Florist, 734 First St.
- LAWRENCE, MASS.**
W. C. Campbell, 17 Lawrence St.
A. Wagland, 647 Broadway.
- LAWTON, OKLA.**
The Hornaday Greenhouses, 11 Maple St.
- LEAVENWORTH, KANS.**
Sunnyside Floral Co., 5th and Delance Sts.
- LENEX, MASS.**
Michael O'Brien.
- LEBANON, IND.**
Paul O. Tauer.
- LEBANON, PA.**
J. F. Vavroux & Sons, 335 Guilford St.
- LEBANON, TENN.**
Anderson Floral Co.
- LEHIGHTON, PA.**
Paul Niehoff, 328 S. First St.
- LEOMINSTER, MASS.**
J. Fuller, Florist, 31 Orchard St.
- LEWISTON, PA.**
R. G. Bowersox, Electric Ave.
- LEXINGTON, KY.**
Honaker The Florist, 160 W. Main St.
John A. Keller Co., 123 E. 6th St.
- LEXINGTON, VA.**
McCrum's.
- LIMA, OHIO.**
Eggert N. Zetlitz, 207 W. Market St.
- LINCOLN, NEB.**
Chapin Brothers, 127 S. 13th St.
Eiche Floral Co., 1333 O St.
Frey & Frey, 1338 O St.
- LISBON, OHIO.**
J. W. Scott, West Lincoln Way.
- LITTLE FALLS, N. Y.**
J. O. Graham, 520 Garden St.

- LITTLE ROCK, ARK.**
Tipton & Hurst, 521 Main St.
- LOCKPORT, N. Y.**
Thomas Mansfield Est., 475 Hawley St.
Lewis Flower Shop, 119 Main St.
- LOGANSPOET, IND.**
J. A. Newby, 809 W. Broadway.
- LONDON, ONT.**
Dick's Flower Shop, 235 Dundas St.
J. Gammage & Sons, Ltd.
West Floral Co., 249 Dundas St.
- LONG BEACH, CAL.**
Lowe's Flower Shop, 220 W. Ocean Ave.
- LONG BRANCH, N. J.**
W. G. Eisele, 327 Cedar Ave.
- LONGMONT, COLO.**
Robbins' Flower Shop, 421 Coffin St.
- LORAIN, OHIO.**
Carek, Florist, 2041 Broadway.
L. C. Hececk Floral Co., 333 E. Broad St.
- LOS ANGELES, CAL.**
D. S. Purdie & Co., 212 W. 4th St.
Redondo Floral Co., 218 W. 7th St.
Wright's Flower Shop, 224 W. 4th St.
- LOUISVILLE, KY.**
August K. Baumer, Masonic Temple.
Jacob Schulz Co., 550 S. 4th Ave.
F. Walker Co., 312 W. Chestnut St.
Wm. Walker & Co., 615 4th Ave.
- LOVELAND, COLO.**
Robbins & Sons, 863 N. Cleveland Ave.
- LOWELL, MASS.**
Morse & Beals, 8 Merrimack Square.
- LYNCHBURG, VA.**
J. J. Fallon, 1009 Main St.
Miss Julia McCarron, 1015 Main St.
- LYNN, MASS.**
Gibbs Brothers, 233 Union St.
Wm. Miller & Sons, 884 Western Ave.
- McKEESPORT, PA.**
J. M. Johnson, 531 Locust St.
- MACON, GA.**
Idle Hour Nurseries, 109 Cotton Ave.
- MADISON, N. J.**
E. Wagner, Keep St.
- MADISON, WIS.**
Kentschler Floral Co., 1301 Williamson St.
- MALDEN, MASS.**
E. D. Kaulback & Son, 160 Pleasant St.
- MALDEN, MASS.**
J. Walsh & Son, 73 Summer St.
- MALONE, N. Y.**
Miss L. G. Rennie, 51 E. Main St.
- MANCHESTER, N. H.**
F. J. Bixby, Trenton St.
- MANKATO, MINN.**
The Windmiller Co., 101 Rhine St.
Neil Neilson, Cor. Front & Marshall Sts.
- MANSFIELD, OHIO.**
Mansfield Floral Co., 14 S. Park St.
Stuhldreher Bros., 32 W. 4th St.
- MAQUOKETA, IOWA.**
H. L. Hill, W. Pleasant St.
- MARIETTA, OHIO.**
J. W. Dudley Sons Co., 290 Front St.
- MARINETTE, WIS.**
George Vatter, 937 State St.
- MARION, IND.**
Marion Floral Co., 406 S. Adams St.
- MARION, OHIO.**
F. E. Blake, 140 N. Center St.
- MARSHALL, MO.**
Marshall Floral Co.
- MARSHALLTOWN, IA.**
James L. Denmead, 109 E. Main St.
Kembles Flowers, 529 N. 3rd St.
- MARSHFIELD, WIS.**
T. D. Hefko, 603 W. 5th Ave.
- MARTINS FERRY, OHIO.**
Chas. E. O'Beirne, 118 S. 4th St.
- MARTINSBURG, W. VA.**
The Flower Shop, 134 King St.
- MARTINSVILLE, IND.**
Martinsville Floral Co., 865 Harrison St.
- MARYVILLE, MO.**
The Engelmann Greenhouses, 1001 S. Main St.
- MASON CITY, IA.**
Kemble & Goodman, 1207 S. Federal St.
- MASSILLON, OHIO.**
Augustus Weaver, 811 E. Main St.
- MAYNARD, MASS.**
Albert Batley & Son, Acton St.
- MAYSVILLE, KY.**
C. P. Dieterich & Sons, 219 Market St.
- MEADVILLE, PA.**
The Posy Shop of Haas & Son, 292 Chestnut St.
- MECHANICSVILLE, N. Y.**
Collins' Flower Shop, 34 N. Main St.
- MEDIA, PA.**
The Lorgus Co., 36 W. State St.
- MEDINA, N. Y.**
White Bros., 546 Main St.
- MEDINA, OHIO.**
Hammerschmidt & Clark, 117 W. Friendship St.
- MELROSE, MASS.**
The Casey Florist Co., 93 Maple St.
- MEMPHIS, TENN.**
Idlewild Greenhouses, 89 S. Main St.
Johnson's Greenhouses, 153 Madison St.
- MENDOTA, ILL.**
Restland Floral Co.
- MERIDEN, CONN.**
Joseph A. Greenbacker, Old Colony Road.
- MIAMI, FLA.**
The Exotic Gardens, 801 12th St.
Miami Floral Co., Ave. J, 13th to 15th Sts.
- MICHIGAN CITY, IND.**
August C. Reicher, 607 Franklin St.
- MIDDLETOWN, OHIO.**
Selby, The Florist, 328 Main St.
- MIDDLEBORO, MASS.**
The Leland Carnation Co., 28½ Centre St.
- MILES CITY, MONT.**
Miles City Greenhouses, 1013 Main St.
- MILFORD, MASS.**
W. D. Howard, 150 S. Main St.
- MILTON, MASS.**
Geo. M. Anderson & Sons, 505 Centre St.
- MILTON, PA.**
Fairview Greenhouses, 224 Turbot Ave.
- MILWAUKEE, WIS.**
Baumgarten Florist, Inc., 130 Mason St.
Currie Brothers Co., 384 E. Water St.
Edliefsen-Leidiger Co., 419 Milwaukee St.
James M. Fox & Son, 437 Milwaukee St.
Gimbel Brothers, Grand Ave. and W. Water St.
- MINERAL POINT, WIS.**
The Greenhouse, W. Fountain St.
- MINNEAPOLIS, MINN.**
L. S. Donaldson Co., Cor. 6th and Nicolet Aves.
Mazey, The Florist, 128 S. 8th St.
Swanson's, Inc., 612 Nicolet Ave.
- MINOT, N. D.**
Valter's Greenhouse.
- MISHAWAKA, IND.**
C. L. Powell, 121 N. Main St.
- MITCHELL, S. D.**
Davison County Greenhouse, 731 S. Montana St.
- MOBILE, ALA.**
The Minge Floral Co., 9 N. Conception St.
The Goodbrad Floral Co., 982 Dauphin St.
- MONCTON, NEW BRUNSW.**
Fraser Floral Co., Ltd., Main St.
- MONESSEN, PA.**
Irwin's Flower Shop, 413 Donner Ave.
- MONONGAHELA, PA.**
I. Shelby Crall Co., 251 Main St.
- MONROE, MICH.**
Otto H. Cron.
- MONTCLAIR, N. J.**
F. W. Massmann, 416 Bloomfield, Ave.
- MONTGOMERY, ALA.**
Rosemont Gardens, 116 Dexter Ave.
- MONTICELLO, IA.**
C. L. Van Meter.
- MONTREAL, QUE.**
Dominion Floral Co., 484 St. Catherine St., W.
McKenna, Ltd., Cor. St. Catherine and Guy Sts.
- MOORHEAD, MINN.**
Briggs Floral Co., Front and Eighth Sts.
- MOOSUP, CONN.**
J. Fred Baker, Prospect St.
- MORGANTOWN, W. VA.**
Sturgiss Florist, 422 High St.
- MORRISTOWN, N. J.**
E. A. Holton, 140 South St.
- MOSCOW, IDAHO.**
Roselawn Greenhouses, 317 N. Main St.
- MT. CARMEL, PA.**
K. M. Erdman & Son, 304 S. Vine St.
- MT. CLEMENS, MICH.**
August Von Boeselager.
- MT. VERNON, ILL.**
Heiserman's, 208 S. 9th St.
- MT. VERNON, N. Y.**
Arthur Dummett, 25 S. 4th Ave.
Clark The Florist, 4th Ave. and 1st St.
- MT. VERNON, OHIO.**
Chas. E. Sharp, 203 S. Main St.
- MUNCIE, IND.**
Mullers, The House of Flowers, Main and Walnut Sts.
- MURPHYSBORO, ILL.**
Wisely, Florist, 16th and Oak Sts.
- MUSKEGON, MICH.**
L. Wassermann, W. Western Ave.
- MUSKOGEE, OKLA.**
Muskogee Carnation Co., 310 W. Broadway.
- NANTUCKET, MASS.**
Voorneveld, The Florist, Centre and Pearl Sts.
- NASHUA, N. H.**
Geo. E. Buxton.
- NASHVILLE, TENN.**
Geny Brothers, 212 5th Ave., N.
Joy Floral Co., 601 Church St.
- NAUGATUCK, CONN.**
A. N. Squire.
- NEVADA, MO.**
Kaupp's Greenhouses.
- NEW ALBANY, IND.**
John G. Bettmann & Son, 1601 E. Main St.
- NEW BRIGHTON, PA.**
Thompson, Florist, 813 3rd Ave.
- NEWARK, OHIO.**
Kent Brothers, 20 W. Church St.
Paul M. Halbrooks, 12 E. Church St.
Charles A. Duerr, 23 Arcade.
- NEWARK, N. J.**
Begerow's, 916 N. Broad St.
Joseph F. McDonough, 376 Bellevue Ave.
Phillips Bros., 938 Broad St.
Washington Florist, 577 Broad St.
- NEWARK, N. Y.**
Arthur E. Bebb, 7 Grace Ave.
- NEW BEDFORD, MASS.**
Peter Murray.
- NEW BRITAIN, CONN.**
Volz Floral Co., 792 W. Main St.
- NEW BRUNSWICK, N. J.**
Frank K. Bennett, 72-78 Louis St.
- NEW BRITGH, N. Y.**
Yuess Gardens Co., 91 Water St.
- NEWBRYPORT, MASS.**
E. W. Pearson, 38 State St.
- NEW CASTLE, PA.**
Butz Bros., N. Mercer St.
Fischer & McGrath, 12 N. Mill St.
- NEW HAVEN, CONN.**
J. N. Champlin & Co., 1026 Chapel St.
The S. H. Moore Co., 1054 Chapel St.
The Myers Flower Shop, 936 Chapel St.
- NEW KENSINGTON, PA.**
McKae-Jenkinson Co., 862 5th Ave.
- NEW LONDON, CONN.**
Fisher, The Florist, 104 State St.
- NEW ORLEANS, LA.**
Avenue Floral Co., 3442 St. Charles Ave.
Charles Eble, 121 Baronne St.
McIntire Ridge Nursery Co., 135 Carondelet St.
- NEW PHILADELPHIA, OHIO.**
Endres Floral Co., 631 W. High St.
- NEWPORT, KY.**
Edwards Floral Co., 527 York St.
- NEWPORT, R. I.**
Thomas J. Gibson, 36 Washington Sq.
Stewart Ritchie, 40 Broadway.
Oscar Schultz, 18 Broadway.
- NEWPORT NEWS, VA.**
Henry C. Van Sant, 3113 Washington Ave.
- NEW ROCHELLE, N. Y.**
Bassi Freres, 202 Main St.
Chapman's, 270 Main St.
- NEWTON, MASS.**
Newton Rose Conservatories, 329 Newtonville Ave.
- NEW YORK, N. Y.**
Astoria Florist, 2188 Broadway.
Boulevard Floral Co., 2391 Broadway.
Charles H. Brown, 2366 Broadway.
Alfred T. Bunyard, 413 Madison Ave.
Frank E. Campbell, 1966 Broadway.
A. B. Cazan, 2751 Broadway.
Charles A. Dards, 41th and Madison Ave.
Drakos & Co., 2953 Broadway.
Thos. F. Galvin, Inc., 561 Fifth Ave.
Fred R. Heaton, Hotel Biltmore.
E. J. Hession, 984 Madison Ave.
J. F. Klausner, 275 Columbus Ave.
J. G. Lelkens, Inc., Madison Ave., at 55th St.
Malandre Brothers, 2077 Broadway.
Peter F. McKenney, 503 5th Ave.
Myer, The Florist, 611 Madison Ave.
Max Schling, 785 5th Ave.
J. H. Small & Sons, 505 Madison Ave.
Geo. E. M. Stumpp, 761 5th Ave.
Alex. Warendorff, 1193 Broadway.
Young & Nugent, 42 West 28th St.
- NIAGARA FALLS, N. Y.**
Bischoff, The Florist, 753 Seventh St.
Harris & Lever, 1218 Portage Road.
- NILES, OHIO.**
C. L. Adgate & Sons, 12 Park Ave.
- NOBLESVILLE, IND.**
Guy C. Sharp, 280 E. Logan St.
- NORFOLK, VA.**
Blick's Inc., 408 Granby St.
George Inc., 319 Granby St.
Grandy, The Florist, 269 Granby St.
Wm. J. Newton, 303 Granby St.
- NORRISTOWN, PA.**
Wm. Yeager Co., 78 E. Main St.
- NORTH ADAMS, MASS.**
Boothman's Flower Shop, 62 Main St.
- NORTHAMPTON, MASS.**
Butler & Ulman.
- NORTH EAST, PA.**
F. E. Selkregg, 49 S. Pearl St.
- NORTH TONAWANDA, N. Y.**
Arthur L. Jones, Cor. Goudry and Division Sts.
- NORWALK, OHIO.**
Charles E. Barton, 12 Whittlesley Ave.
- NORWICH, CONN.**
Geduldig's Greenhouse, 77 Cedar St.
- NORWICH, N. Y.**
E. F. Quinn, 90 E. Main St.
- NYACK-ON-HUDSON, N. Y.**
Robert Chester Pye.
- OAKLAND, CAL.**
J. Seulberger & Co., 418 14th St.
- OAKLAND, MD.**
The H. Weber & Sons Co.

- OAK PARK, ILL.**
Albert Schneider, 1018 Lake St.
- OBERLIN, OHIO.**
Harry A. Cook, 63 S. Main St.
- OGDENSBURG, N. Y.**
John Lawrence, 33 Ford St.
- OHIO CITY, PA.**
W. M. Devoe & Co., 6 Seneca Ave.
- OKLAHOMA CITY, OKLA.**
The Foster Floral Co., 120 W. Main St.
Furrow & Co., 208 E. Oklahoma St.
The Stiles Co., 202 W. Main St.
- OKMULGEE, OKLA.**
Mrs. Wm. S. Bell, 721 N. Grand Ave.
George W. Marshall, 112 S. Morton Ave.
- OLEAN, N. Y.**
Dana R. Herren, 113 N. Union St.
- OMAHA, NEB.**
John H. Bath, 1801 Farnum St.
Lewis Henderson, 1519 Farnum St.
Hess & Swoboda.
Louis M. Rogers, 319 South 16th St.
- OSHKOSH, WIS.**
The Miles Co., 76 Frankford St.
- OSKALOOSA, IOWA.**
Kemble Floral Co.
- OSWEGO, N. Y.**
Floral Art Studio, 126 W. 2nd St.
W. H. Workman, 61 W. Bridge St.
- OTTAWA, ILL.**
Wm. S. Lehr, 1600 Ottawa Ave.
- OTTAWA, ONT.**
R. H. Wright, 54 S. Parks St.
- OWENSBORO, KY.**
Nanz Floral Co., 100 E. 2nd St.
- OWOSSO, MICH.**
Owosso Floral Co., 201 W. Main St.
- PADUCAH, KY.**
Schmaus Brothers, 504 Broadway.
- PAINESVILLE, OHIO.**
Wilson Flower Shop, 124 N. St. Clair St.
- PALM BEACH, FLORIDA.**
Foster & Foster, Hotel Royal Poinciana.
- PANA, ILL.**
Pana Greenhouses, Cor. 3rd and Chestnut Sts.
- PARIS, ILL.**
John A. Helfrich.
- PARIS, KY.**
The John Christman Co., 19th St.
- PARKERSBURG, W. VA.**
J. W. Dudley & Sons, 5th and Juliana St.
- PASADENA, CAL.**
Henry A. Siebrecht, Jr., 381 E. Colorado St.
Eldred Flower Shop, 260 E. Colorado St.
The Orchid, 342 E. Colorado St.
- PASSAIC, N. J.**
Edward Seery, Main and Bloomfield Ave.
- PATERSON, N. J.**
Edward Seery, 85 Broadway.
Wm. Thurston, 88 Van Houten Ave.
- PAWTUCKET, R. I.**
Frederick C. Hoffman, 306 Main St.
- PEORIA, ILL.**
Charles Loveridge, 423 Main St.
Cole Bros., 431 Main St.
- PERU, IND.**
Wm. G. Miller, 366 W. 3rd St.
- PETERBOROUGH, ONT.**
Peterborough Floral Co., 347 George St.
- PETERSBURG, ILL.**
Thomas Salvason.
- PETERSBURG, VA.**
Mrs. Robt. B. Stiles.
- PETOSKEY, MICH.**
Frank Winans, 715 Pleasant St.
- PHILADELPHIA, PA.**
Charles Henry Fox, 221 S. Broad St.
Fox Flower Shop, 1307 N. Broad St.
John C. Gracey, 2034 Columbia Ave.
E. W. Gaehring, 3054 Frankford Ave.
Charles H. Grakelow, 2453 N. Broad St.
J. J. Habermehl's Sons, Bellevue-Stratford Hotel.
The Chas. F. Krueger Co., Reading Terminal.
Frank Alter.
J. Wolff Moore, 1639 N. Broad St.
Mr. August Muller, 718 Walnut St.
Pennock Brothers, 1514 Chestnut St.
Frank M. Ross, 136 S. 52nd St.
Rupert Kientle, 30 S. 7th St.
Gustave Koethe, Roxborough.
Martin Street Greenhouses.
- PHOENIX, ARIZ.**
Ariz. Seed & Floral Co., 28 S. Central Ave.
Donofrio Floral Department, Cor. Cretus and Washington.
- PHOENIXVILLE, PA.**
Pennypacker & Son, 221 Bridge St.
- PIQUA, OHIO.**
Gerlach, The Florist, 1521 Washington Ave.
- PITTSFIELD, MASS.**
F. J. Drake & Co., 175 North St.
- PITTSBURGH, PA.**
E. C. Ludwig Floral Co., 710 E. Diamond St.
Randolph & McClements, 5936 Penn Ave.
A. W. Smith Co., Keenan Building.
Mrs. E. A. Williams, 621 Penn Ave.
- PITTSFIELD, MASS.**
The Flower Shop, 40 Fenn St.
- PITTSTON, PA.**
B. B. Carpenter, Susquehanna Ave.
The William St. Florist, 8 William St.
- PLAINFIELD, N. J.**
Chas. L. Stanley, 159 E. Front St.
- PLATTEVILLE, WIS.**
The Platteville Floral Co.
- PLEASANTVILLE, N. J.**
Walter R. Thoms, 11 E. Verona Ave.
- PLYMOUTH, MASS.**
Stevens The Florist, 9 Court St.
- POCATTELLO, IDAHO.**
W. A. Worrel & Son, 636 N. Grant Ave.
- PONTIAC, ILL.**
W. J. Miller & Son, 412 Payson St.
- PONTIAC, MICH.**
Pontiac Floral Co., 559 Orchard Lake Ave.
- PORT CHESTER, CONN.**
Burgevin Greenhouses, N. Regent St.
Lundell & Schwartz.
- PORT HURON, MICH.**
Mathias Ullenbruch, 1027 Military St.
- PORTLAND, IND.**
W. Frank & Son.
- PORTLAND, ME.**
J. W. Minott Co., 615 Congress St.
Philip H. Talbot, 673 Congress St.
- PORTLAND, ORE.**
Martin & Forbes Co., 354 Washington St.
Tonseth Floral Co., 287 Washington St.
- PORTSMOUTH, OHIO.**
The Herms Floral Co., 817 6th St.
- POTTSTOWN, PA.**
Edwin Wickersham, 638 King St.
- POTTSVILLE, PA.**
Guy W. Payne, 21st and Market Sts.
- POUGHKEEPSIE, N. Y.**
Saltford Flower Shop, 286 Main St.
- PRAIRIE DU CHIEN, WIS.**
Dial Garden Greenhouse.
- PRINCETON, ILL.**
W. E. Trimble Greenhouses, 501 Peru St.
- PRINCETON, IND.**
Princeton Gardens.
- PRINCETON, N. J.**
John Heeremans, 48 Spruce St.
T. J. Johnston & Co., 107 Washington St.
Johnston Brothers, 38 Dorrance St.
Wm. A. Bowers, 134 Washington St.
- PROVINCETOWN, MASS.**
W. C. Newton, 212 Commercial St.
- PUEBLO, COLO.**
G. Fleischer, 216 N. Main St.
- PUNXSUTAWNEY, PA.**
Crissman Greenhouses Co., Findlay St.
- QUEBEC, CANADA.**
McKenna, Ltd., 9 St. John St.
- QUINCY, MASS.**
Johnson's City Flower Store, 1361 Hancock St.
- QUINCY, ILL.**
Gentemann Brothers.
- RACINE, WIS.**
The Flower Shop, 617 Main St.
- RAHWAY, N. J.**
John R. Baumann, 633 St. Georges Ave.
- RALEIGH, N. C.**
J. L. O'Quinn & Co., Cor. Park & Swain Sts.
- RATON, NEW MEXICO.**
Raton Greenhouses, 1100 N. Second St.
- READING, PA.**
J. C. Bauder, 10th and Windsor Sts.
Paul Blackman, Jr., 116 N. 9th St.
J. H. Giles, 123 S. 5th St.
Harry C. Huesman, Schuylkill and Greenwich Sts.
B. & L. Steckler, 1018 Center Ave.
- RED BANK, N. J.**
Hayes Brothers, 20 W. Front St.
W. W. Kennedy & Sons, 41 Broad St.
- RHINEBECK, N. Y.**
Elmer Coon, 17 Chestnut St.
- RICHMOND, IND.**
Fred H. Lemon & Co., 1015 Main St.
- RICHMOND, VA.**
Hammond Co., Inc., 109 E. Broad St.
Mann & Brown, 5 W. Broad St.
Mosmiller Florist, 115 E. Main St.
Ratcliffe & Tanner, 207 N. 6th St.
- ROANOKE, VA.**
Fallon Florist, 210 Jefferson St.
Wertz Florist, Inc., 10 Kirk Ave., S. W.
- ROCHESTER, MINN.**
Broadway Flower Shop, 112 S. Broadway.
Parkin & McQuillan, 114 S. Main St.
Rochester Floral Co., 119 S. Main St.
Queen City Greenhouse, 111 W. Zumbro St.
- ROCHESTER, N. Y.**
Geo. T. Boucher, 345 E. Main St.
J. B. Keller-Sons, 25 N. Clinton Ave.
H. E. Wilson, 88 Main St.
- ROCHESTER, PA.**
Thompson, Florist, 238 Jackson St.
- ROCKFORD, ILL.**
H. W. Buckbee.
Swan Peterson & Son, State and Longwood Sts.
- ROCK ISLAND, ILL.**
The Flower Shop, 1616 2nd Ave.
- ROCKVILLE CENTER, N. Y.**
Clarence R. Ankers.
- ROCKYFORD, COLO.**
C. M. Ustick.
- ROME, N. Y.**
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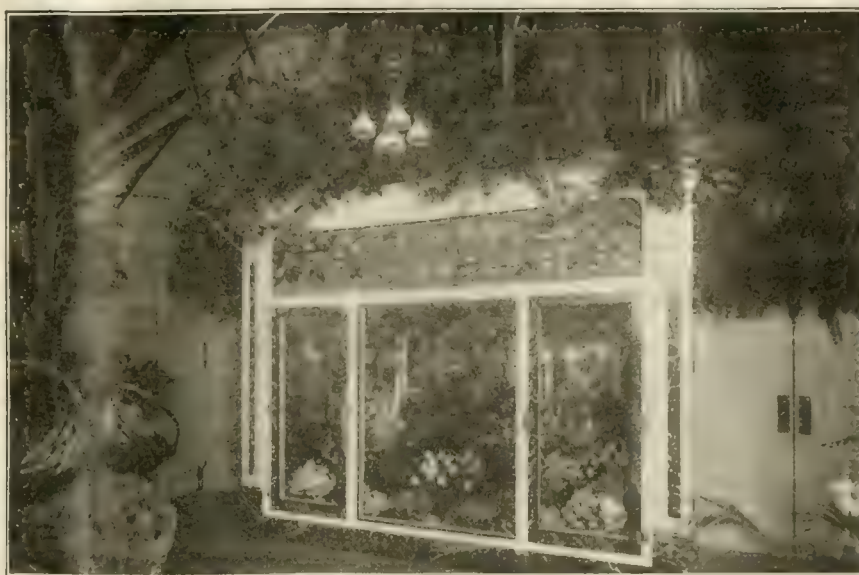
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USE OF COMMERCIAL FERTILIZERS IN GROWING CARNATIONS.

The Illinois Agricultural Experiment Station has investigated the feasibility of using commercial fertilizers entirely or partially as a source of plant food in the production of carnations, with the intention of finding out: (1) which of the fertilizers dried blood, acid phosphate, and potassium sulfate, or what combination of them, is most profitable for this purpose; and (2) the comparative production and quality of carnations grown entirely with farmyard manure and those grown with commercial fertilizers as a supplement to a smaller amount of manure. In the first experiment the benches of a house 28 feet by 100 feet were divided into 6-foot sections of twenty-four plants each. These benches were filled with brown silt loam, the soil characteristic to this part of the state, fertilized with cow manure at the rate of about 22 tons per acre. In addition to the manure, some combination of the fertilizers named above was also applied.

The varieties White Perfection, Enchantress, Beacon were used. Records were kept on the following points:

1. Number of flowers.
2. Condition of the calyx.
3. Size of the flower.
4. Length of the stem.
5. Stem strength (1911-13 only).
6. Condition of the flower.

The extent of the experiment may be judged from the fact that during the three years 5,568 plants were grown,

producing during the seven-month periods (October to April inclusive) when records were taken, 81,990 flowers.

In the second experiment comparative records were taken during a period of seven months, for two successive years, upon plants grown with farmyard manure and others grown with manure and moderate quantities of commercial fertilizers. Where farmyard manure was used exclusively, an application at the rate of some 60 tons per acre at the time of setting in the plants was supplemented during the season with mulches of sheep manure, and with waterings of liquid cow manure about every two weeks.

Where commercial fertilizers were used, the original application of manure was made at the rate of about 22 tons per acre, in connection with an application of 2 pounds of dried blood per 100 square feet of bench space and 2 pounds each of acid phosphate and potassium sulfate. Further applications of dried blood at the same rate were made as top-dressings lightly worked into the soil, on November 1, December 21, and February 13.

Records were kept as in the previous experiment. During the two years in which this experiment was conducted, 1056 plants were grown, producing 16,094 flowers during the seven-month periods when records were taken.

In the first experiment applications of dried blood in moderate quantities resulted in an increased production of flowers, with, however, a slight de-

crease in their size and the length of their stems. The small applications of acid phosphate and those of potassium sulfate produced no consistent results. Larger applications of acid phosphate, with a moderate quantity of dried blood, caused an increase in production of flowers, and an improvement in their quality. Large quantities of dried blood and potassium sulfate caused injury from overfeeding, that from potassium sulfate being especially marked and persistent.

The second experiment showed that a moderate use of commercial fertilizers in addition to about one-third the manure ordinarily used, and followed only by three top-dressings of dried blood, produces as large a number of flowers as is produced by culture with manure alone. The quality, measured by width of flower, length of stem, percentage of flowers with perfect calyces, and keeping quality was equally satisfactory with either method of culture. The time of maximum crop production was found to be practically uninfluenced by the kind of fertilizer applied and by its time of application.

Comparative experiments with dried blood and ammonium sulfate have shown that either is a satisfactory fertilizer if used in moderate quantities.

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COMING MEETINGS AND EXHIBITIONS.

Detroit, Mich.—S. A. F. and O. H. Convention at Acadia Hall, Aug. 19, 20 and 21. Sec'y, John Young, 1170 Broadway, N. Y. City.

Detroit, Mich.—American Gladiolus Society, tenth annual meeting, in Arcadia Auditorium, August 19 to 21. Sec'y, Prof. A. C. Beal, Cornell University, Ithaca, N. Y.

Detroit, Mich.—Vegetable Growers' Ass'n of America, annual convention, Detroit, Mich., Sept. 9 to 13. Sec'y, Sam. W. Severance, Louisville, Ky.

Hartford, Conn.—Conn. Hort. Society Fall Flower Show, Sept. 9, 10 and 11. Sec'y, Alfred Dixon, Wethersfield, Conn.

New Haven, Conn.—New Haven County Hort. Society, annual fall show, Sept. 30 and Oct. 1.

New York City.—The American Institute and the American Dahlia Society, exhibition of dahlias in the Engineering Bldg., 25-33 West 39th St.,

Sept. 23 to 25. Sec'y, William A. Eagleson, 322-24 West 23rd St.

New York City.—The American Institute and the Chrysanthemum Society of America, exhibition of chrysanthemums in the Engineering Bldg., 25-33 West 39th St., Nov. 5 to 7. Sec'y, William A. Eagleson, 322-24 West 23rd St.

Providence, R. I.—Rhode Island Hort. Society, flower show, Sept. 18 and 19; chrysanthemum show, Nov. 13 and 14. Sec'y, Ernest K. Thomas, Kingston, R. I.

San Francisco, Cal.—Dahlia Society of California, fall show at the Palace Hotel, Sept. 4, 5 and 6.

Ardmore, Pa.—Exhibition of dahlias, outdoor cut flowers and vegetables of the Pennsylvania Horticultural Society, Sept. 16-17. Sec'y, David Rust, 606 Finance Bldg., Philadelphia.

Newport, R. I.—September exhibition of the Newport Horticultural Society, Convention Hall, Newport Beach, Sept. 3-4.

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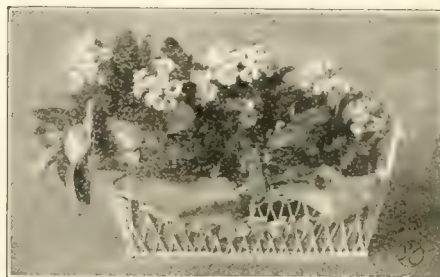
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GROWING MUSHROOMS.

It is not as difficult to grow mushrooms successfully as many people seem to think, according to S. W. Carlquist, writing in the International Garden Club's Journal. Mr. Carlquist continues: A cellar or tight shed under the barn is a good place to grow mushrooms during the summer months; whereas for winter and cold weather it will be necessary to have a place either provided with some means of heating or so constructed that the place will be frostproof. For summer use the beds should be made up from March to May and for winter crops from September to December. Good material for beds is best obtained from livery stables. In gathering up the manure, take all the saturated straw

with the droppings, pile this into a rather deep compost and have on hand some good moist friable soil about one-third in bulk to the manure. As soon as the manure pile shows signs of fermentation turn the mass over thoroughly, mix and see that the manure on the outside gets in the center and vice versa. After the compost has been turned, cover over with a layer of soil, incorporating this with the manure and repeat the operation morning and evening until in about a week's time the rank heat has subsided and the whole mass presents a dark brown spongy color. With the addition of soil each time of turning, as mentioned above, there is little danger of the compost overheating and burning. Should the mass show signs of dry-

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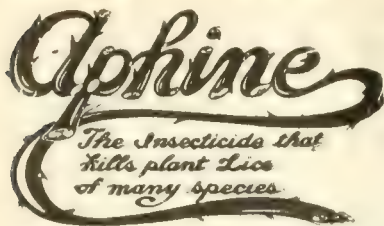
ness, however, use the watering can
 until sufficient moisture is obtained.

In laying the beds have two men do
 the operation, one to shake up and
 throw in the manure, and the other to
 pack in the material firmly and even.
 Lay the beds firmly, about 14 to 16
 inches thick and then pound or tramp
 down to about 10 to 12 inches. Place
 a thermometer in the bed and when
 after a few days the temperature has
 subsided to 85 or 80 degrees spawn
 the bed. Fresh American pure cul-
 ture spawn is always reliable and will
 produce a good crop of solid fine fla-
 vored mushrooms. Break up the
 bricks of spawn into pieces about 3
 to 4 inches square, place over the bed
 12 to 14 inches apart. Take a trowel
 and plant in the bed so that each
 piece will be covered with about 1
 inch of manure. Firm the bed down,
 smooth and level. In about ten days
 or two weeks cover the bed over with
 some good garden soil passed through
 a rather coarse sieve, spread out level
 and firm down to an inch thickness.

The ideal temperature in a mushroom
 house is 55 degrees. In the summer

months it is sometimes hard to keep
 the temperature down below 60 to 65
 degrees, but by keeping the floor well
 sprinkled and the place tight and dark
 in the day time and by opening the
 door or ventilator wide by night or
 even having a large cake of ice on the
 floor, the temperature may be kept be-
 low 70 degrees most of the time. If
 the room stays around 70 degrees for
 any length of time the whole crop is
 liable to be ruined as maggots will be
 sure to develop. As soon as the beds
 show signs of dryness, they should be
 given a sprinkling of tepid water in
 which a handful of nitrate of soda has
 been dissolved to each two gallons of
 water.

Pick the mushrooms by twisting
 them up from the bed. After each
 picking go over the beds, pick up all
 rotted dead heads or withered small
 specimens and fill in all holes with
 soil. After the beds have been in
 bearing for some time and the crop
 shows signs of weakening, sieve a
 layer of good moist soil over the
 whole bed. Water this, using tepid
 water and nitrate of soda as mentioned



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above and the beds will soon show new life. This operation may be repeated from time to time.

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The culture of freesias is of the simplest character. The plants like rich, open and fairly light soil, cool temperature, abundance of sunlight at all stages of growth, and plenty of moisture as the blooming season approaches. Bulbs or corms should be potted up in August or September, as it is not well to keep them long out of the soils. Seven large bulbs or about ten smaller ones, can be well accommodated in a six-inch pot which should be provided with ample drainage. Press the bulbs to the level in the damp compost and cover with half an inch or more of coarse sand, or fine gravel if available. Place outside in a sheltered situation and water sparingly until growth starts, then more freely. At the approach of hard frost in October the pots or boxes should be removed to a light, cool greenhouse bench and given free ventilation and

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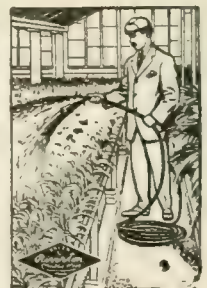
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sufficient moisture to maintain a slow but steady growth. The ordinary carnation temperature of fifty degrees at night with a reasonable rise on bright days suits them to perfection if ventilation is well attended to. By the middle of December the plants will need support, which is best given by four bamboo or wire stakes sixteen inches long with encircling cords to each pot, or a similar arrangement if grown in boxes or the open bench, as florists sometimes attempt. Blooms appear from February to March or earlier if the temperature is run higher, but forced freesias are usually deficient in texture and keeping quality. After blooming the bulbs should be allowed five or six weeks to mature their growth, then gradually dried off and stored in the earth in pots or boxes or even in the open bench, keeping a wary eye for the depredation of mice or rats which occasion frequent losses. In midsummer they should be shaken free of soil and assorted, the small cormels or bulblets being separately grown much closer together, if it is desired to increase the variety. Seedlings for the production of new varieties may be grown in much the same manner, but they cannot be relied on for the perpetuation of the parent types. From twelve to fifteen seeds are about right for a six-inch pot of compost similar to that in which the flowering bulbs are grown, or seeds can be spaced an inch apart in rows six or more inches apart in boxes of the same depth. They should be well firmed in and covered with half an inch of clean sand. August appears a good month in which to sow freesia seeds, as the plants grow slowly throughout the fall months and early winter and are usually strong enough to bloom by the following April. Seedlings should have exactly the same treatment as the larger bulbs as regards temperature, light and moisture. If space is limited seeds may be sown as thickly as one hundred to a six-inch

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pot, but there is risk of "damping off" and the resulting corms are so small that they cannot bloom until given ample space in succeeding years.—*Journal of the International Garden Club.*

A FINE SHOW AT MANCHESTER.

The exhibition of the North Shore Horticultural Society, held in Horticultural Hall, Manchester-by-the-Sea, Mass., August 6th and 7th, was the largest in years, the entire upper hall being filled with flowers, while the lower hall had to be used for flowers, there not being room in the upper hall for the number to be exhibited. The exhibit of fruits and vegetables in the basement was large, and competition keen.

The largest exhibit in the hall was that of J. K. Alexander, East Bridgewater, who displayed dahlias, gladiolus and phlox very effectively in vases and baskets. He had two large tables decorated with dahlias; notably among them was a large basket of Mr. Alexander's new seedling decorative dahlia "Frank A. Walker" which received the award of merit. This was a beautiful lavender-pink decorative dahlia with long stiff stems, and promises to be one of the very finest cut-flower dahlias. Other new dahlias of special merit in the exhibit were "Bianca" lavender and white blending of hybrid cactus type;

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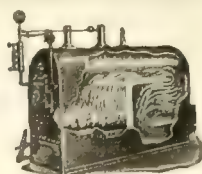
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"King of the Autumn" a clear orange decorative, and "Mrs. Warnaar" white with pale pink suffusion hybrid cactus. All three were late importations from Holland. Mr. Alexander's new show dahlia "Maude Adams" occupied a prominent position, with three large vases of a blending of pink and white. "Kalif" a brilliant crimson-scarlet hybrid cactus was the finest red dahlia in the show.

B. Hammond Tracy, Wenham, Mass. had a very artistic display of primulinus gladiolus. Mr. Tracy's exhibit covered the stage of the hall, and was set-off with a screen of spruce trees, with spruce boughs effectively laid among the baskets.

The most beautiful gladiolus in the show was an exhibit of A. E. Kunderd's seedlings exhibited by the originator, A. E. Kunderd, Goshen, Indiana. "Marie Kunderd," a pure white ruffled seedling, was the most beautiful white Gladiolus in the show. Certificates of merit were awarded two of his Primulinus Hybrid seedlings: "Alice Tiplady," a beautiful clear orange with yellow throat, and "Mary Pickford," a white with a cream colored throat.

The dinner table decorations were an addition to the usual exhibition, and proved a success in every way. In the commercial class Penn the Florist, of Boston, won first premium for eight covers with roses and delphinium.

The local florist, Alex Magnuson, had a large display of cut flowers that attracted considerable attention, being the best display of hardy perennials.

In the center of the hall was a well-designed display of aquatics from the Mrs. W. H. Moore estate, Mr. A. E. T. Rogers, gardener, Prides Crossing, Mass. Among the tender day-flowering Nymphaeas were "Mrs. C. W. Ward" pink, "Zanzibarensis" blue, "Gracilis" pure white; Tender Night-flowering Nymphaeas, "Ruba-Rosea," a deep rose pink, and "Devoniensis" pink; Hardy Nymphaeas, "Alba" white, "Sioux" deep orange, and "Signaturetti," a pale orange; Water Hyacinths or Eichhornia, the blue flowered variety

"Crassipes Major" and Ornamental Water Grass *Cyperus Nataliensis*. From the Mrs. Lester Leland Estate of Manchester was a wonderfully good collection of Begonias.

The exhibition committee were Alfred E. T. Rogers, chairman, Allen S. Peabody, Douglas Eccleston, Martin Eyeberse, and Axel Magnuson. With groups in the center of the hall and massed exhibits against the wall, the committee proved their efficiency.

Among the winners were: J. K. Alexander, East Bridgewater, Mass., Silver Medal for largest display of Dahlias; Silver Medal for finest display of Gladiolus; Silver Medal exhibition of Phlox; Certificate of Merit for new lavender-pink Decorative Dahlia, "Frank A. Walker."

B. Hammond Tracy, Cedar Acres, Wenham, Mass., Silver Medal, special display of Primulinus Gladiolus.

A. E. Kunderd, Goshen, Indiana, Silver Medal for collection of Gladiolus, Certificate of Merit "Marie Kunderd," new white Gladiolus; Certificate of Merit, "Alice Tiplady," orange with yellow throat Gladiolus, Certificate of Merit for "Mary Pickford," new white seedling Gladiolus.

Penn the Florist, Boston, Mass., first premium for eight covers dinner table decoration; and Axel Magnuson, Manchester-by-the-Sea, Mass., Silver Medal for finest display of cut flowers.

The Mrs. W. H. Moore estate received the first premium for display of Aquatics, and Mrs. Lester Leland estate first premium for group of flowering and foliage plants arranged for effect covering space of 100 sq. ft.

HOW TO SOW FINE SEEDS OF FLOWERS.

Often the complaint is made that seeds of Primula, Cineraria, Calceolaria, Gloxinia, and others of a very fine minute character, do not germinate. How to sow these seeds is of such vast importance that we deem it proper to give a few hints or suggestions which, of course, are intended for the layman, but may also be of some inter-

est to the professional gardener and florist.

The best receptacle in which to sow these seeds is a shallow box, which need not be more than two inches deep, with holes at the bottom through which water will drain quickly. These boxes should be filled with finely sifted sandy soil which has been run through a sieve as fine as mosquito netting. The soil should be mixed with an equal bulk of leaf-mould, also sifted as fine as possible.

The object is lightness of soil, for if such tiny seeds are sown in a stiff soil, the germ, though of strong vitality, is too weak by nature to find its way through.

After filling the boxes with the proper soil to within a half-inch of the top, pat it down with a smooth board until it is as level as it can be. Sow the seed carefully over the surface, distributing it evenly, and sift with a sieve, just so much soil over the seed as will barely cover it lightly, and no more, pressing it down again with a smooth board.

Then take a sprinkling-pot with the finest kind of a rose and shower the soil with a spray. Cover the box with glass until the seeds have germinated, keeping it at a temperature as nearly sixty (60) degrees as possible at night, and spray only when the surface appears dry.

As soon as the seed leaves have developed, they must be transplanted carefully in light soil, similar to that used for the seeds, at a distance of from one to two inches apart, (also in boxes). This will not only prevent them from damping off, but they will become much stronger. In a few weeks, they will be strong enough to plant in 2¼ or 2½ inch pots.

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FOR SALE—Greenhouse property, about two acres of land; opposite Cemetery, 7,000 ft. of glass; residence and store; doing fine business. No letters. **OSGOOD BROS., Everett, Mass.**

CEDRUS ATLANTICA GLAUCA.

This beautiful conifer deserves more recognition than it seems to get at present. Some erroneous ideas as to its hardiness, I believe, are partly responsible for its not being used in ornamental plantings more than it is. It has stood 14 degrees below zero here in Rhode Island, which would lead one to assume it may be classed as a fairly hardy tree. Although that was a little severe, browning the foliage some, yet, in the spring it broke out in its natural steel blue as beautiful as ever. Given a good open position this cedar will make a handsome specimen well worth seeing any month in the year. It is of vigorous upright growth when well established, the branches are low and of a compact habit. It is apt to make a tap root, and should there be occasion to move it to another location, great care would have to be used in the operation, that is if the tree has grown to a fair sized specimen. *International Garden Club Journal.*

ROCHESTER.

Midsummer dullness prevails and the supply of stock is plentiful with the exception of carnations.

Visitors last week were as follows: **R. E. Blackshaw of Ove, Gnat Co.; John Lambert of Chicago; Steve Green of Bayersdorfer; James Karins, of Dreer Co., Philadelphia, Pa.**

John Rubel, formerly employed by Rochester Floral Co., has returned from France, having served over a year with the 3rd Army Corps.



Morse's Selected Onion Yellow Danvers

Before placing an order for 1919 Crop Onion Seed, send for prices for Morse's **Selected Stock**.

We have the correct types at the right prices.

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Quality Seed Growers
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Principles and Practice of Pruning

By M. G. KAINS

Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

After a few pages of introduction the author discusses Plant Physiology as related to pruning. A chapter takes up the Philosophy of Pruning, itself a very interesting subject. Then follows a classification and clear discussion of Buds, very fully illustrated from life. How Wounds Heal is an exceedingly interesting chapter, as are also those on Prevention and Repair of Mechanical Injuries, Pruning Nursery Stock, Young Trees, Mature Trees and Odd Methods of Pruning and Training, Rejuvenating Neglected Trees and Practical Tree Surgery.

Profusely illustrated. 400 pages. 5½ x 8 inches.
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Plant Propagation, Greenhouse and Nursery Practice

By M. G. KAINS

We have had many inquiries from time to time for a reliable and up-to-date book on plant propagation, but were always at a loss to find any publication that we could recommend. The subject has been dealt with in fragmentary manner only in books that have come to our notice. So it is well that this new work has been issued, especially as it is both comprehensive and practical, and it should meet with a ready sale among plantsmen, nurserymen and gardeners. There are nineteen chapters covering in detail topics of germination and longevity of seeds, propagating by buds, layering, cuttings, grafting, etc., fruit tree stocks, scions, etc., and there are eight pages of condensed cultural instructions in tabulated form, covering annuals and perennials from seed, woody plants, evergreens, vines, bulbs and tubers, greenhouse and house plants, ferns, palms, water plants, orchids and cacti. The illustrations are numerous, comprising 213 figures and halftone plates. There are 322 pages well bound and on heavy paper, teeming with helpful information. It is a book which no cultivator can afford to do without. It is worth many times its price. Copies can be supplied from the office of HORTICULTURE at publisher's price, \$1.50.

HORTICULTURE PUBLISHING CO.
147 Summer St., Boston, Mass.

HORTICULTURE

Vol. XXX

AUGUST 23, 1919

No. 8

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

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and
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We want you to know them. May we send you full descriptions? Your request will bring it.

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Nephrolepis elegantissima, Elegantissima Compacta, Muscosa and Superbissima, 3½-inch pots.....	\$.35 each
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Elegantissima, and Elegantissima compacta, 10-inch pots..	4.00 each
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Boston and Scottii, pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

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Alyssum Giant Double, Heliotrope, Lantanas, English Ivy, Swainsona, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts. For immediate shipment from 2-inch pots \$2.50 per 100, \$22.50 per 1,000.

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Strong Plants in 3½ in. pots, \$25.00 per 100

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With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

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SPECIALIZE IN

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(personally selected strains)

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IMPROVED

Per 1000

¾ to 1 inch..... \$6.00
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Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

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S. A. F. Convention, Detroit, Aug. 19-20-21 at the

BUSY A. B. C. BOOTH

We can still accept orders for Freesia—different varieties:

FREESIA PURITY--Improved
 $\frac{1}{2}$ to $\frac{5}{8}$ -in. . \$9.50 per 1000

RAINBOW FREESIA

	<small>100</small>	<small>1000</small>
First Size . . .	\$4.00	\$35.00
Second Size . .	3.00	20.00

FREESIA--Sunset Coll. PINK MIX.

	<small>100</small>	<small>1000</small>
First Size . . .	\$5.50	\$50.00
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LARGE LIST OF DUTCH, FRENCH AND CALLA BULBS

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AMERICAN BULB CO.

A. B. C.

172 N. Wabash Ave., Chicago, Ill.

WATCH US GROW

WATCH US GROW

FLORIST WAS ALERT.

Bad Check Artist Failed to Victimize Mr. Butterworth.

Through the alertness of John T. Butterworth, a Framingham, Mass. florist, William B. Lannell, 33, claiming a residence at Churchill place, Lynn, is in the toils charged with attempting to pass a forged check on Mr. Butterworth.

According to Mr. Butterworth and the police, Lannell bought from Mr. Butterworth \$30 worth of floral pieces for the funeral of a relative, tendering in payment a check for \$610.50, drawn on the Union Market National Bank, Watertown, in favor of Allan E. Joyce and bearing the purported signature of William Fournier.

Lannell told Mr. Butterworth that as long as he was not known at the banks in Framingham, he would ask him to indorse the check, so that he could obtain the money to pay for the flowers.

Mr. Butterworth told Lannell to leave the check with him, and go to the Framingham Trust Company and see if such arrangement would be acceptable to the officers. Lannell complied with the request but did not go near the Trust Company nor did he return to Mr. Butterworth's place of business.

Lannell was subsequently found at the State Camp Grounds by Chief of Police Holbrook and identified by Butterworth.

The police of several cities and towns where florists and undertakers recently have been victims of swindlers using bad checks, were notified of Lannell's arrest.

ROCHESTER, N. Y.

During the past week there has been a scarcity of flowers. No roses have been arriving from eastern points on account of the railroad tie-up.

For the first time in years the Rochester Florists' Association held a picnic, August 12, at Grand View Beach. Its flower shows and outings had been suspended during the war, and the members did their best to make up for lost time. The committee in charge expected that about 175 would attend, but upon arrival at the beach the committee found it would have to take care of more than 250.

Miss Hattie B. Ellis of Rock Floral Co. is spending a two weeks' vacation at Grassy Point, Sodus Bay.

Horace Head of Wilson Floral Co. has severed his connections with the above firm and accepted a position with Geo. B. Hart as traveling salesman.

IRIS

Special Offer of Surplus Stock

While they last we will sell a selected list of Iris at a discount of 80% from retail catalogue prices.

The special list includes such choice varieties as Albert Victor, Celeste, Dalmarius, Doctor Bernice, Frederick, Iris King, Lohengrin, Mme. Chereau, Mrs. H. Darwin, Pallida Dalmatica, Princess Victoria Louise, Queen of May, Pheonix, Waihalla, Wyomissing and others

Not less than 20 of one variety at this price. No order accepted for less than 100.

A rare opportunity for dealers to improve their stock. Send for surplus list and order early.

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 HAVERFORD, PENNA.

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	Per 100	Per 1000
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ROOSEVELTS	6.00	50.00
WHITMANI	6.50	55.00
WHITMANI COM- PACTA	6.50	55.00
VERONA	6.50	55.00
TEDDY, JR.	6.50	55.00

Stock all sold until June 1st.

Order either direct or through
S. S. Skidelsky & Co., Sole Agents
Philadelphia, Pa.

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POINSETTIAS

2 1/4 inch, \$10.00 per 100
\$90.00 per 1,000

EUPHORBIA JACQUINIAE FLORA

2 1/4 inch, \$16.00 per 100
No C. O. D. shipments.
Write for Prices.

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PLANT BROKERS

329 Waverly Oaks Road, Waltham, Mass.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred;
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Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers
in America
BOX 418, DUNDEN, ILL.

Primula Malacoides Rohrerii

The best strain of Malacoides on the market. Years of patience have developed it to perfection. The beautiful shades of Rose Pink, Light Lavender and Snow White make it one of the most desirable and profitable plants to grow not only as single plants but for combination work it cannot be excelled.

	100	1000
Pink and Lavender mixed, 2 1/2 in.	\$6.00	\$55.00
Pure White, 2 1/2 in.	7.00	60.00
Malacoides Townsendi, Shell Pink only, 2 1/4 in.	6.00	55.00
PRIMULA OBCONICA—Roses Gigantea and Grandiflora, Apple Blossom and Kermesina. 2 1/4 in.	7.00	60.00
Eureka. New variety, very fine Chinensis x Obconica. Large flower, extra fine color. 2 1/2 in.	7.50	65.00
Chinensis. 2 1/4 in.	6.00	55.00

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IBOLIUM The New Hybrid HARDY PRIVET (L. Iboia x Oval- folium)

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FREESIA BULBS

Purity (Improved)

	Per 1000
Size 1/2-5/8ths inch (large)	\$8.50
Size 5/8ths-3/4 inch (mammoth)	13.50

NOW READY

CALLA LILY BULBS

Size 1 1/2-2 inches, \$9.00 per 100
Cash with order, less 2 per cent.

McHUTCHISON & CO., The Import House
95 Chambers Street NEW YORK

THE H. D. ROHRER STRAIN OF MALACOIDES.

This primula is quite a favorite now as a pot plant and is a popular welcome addition to the obconica group for winter and spring sales. Mr. Rohrer sends us the following interesting notes on his efforts in this connection:

For the past eight years we have been selecting our seed plants carefully, using only those of free-blooming, well-colored and well-shaped plants, thus eliminating the extremely light and sometimes displeasing shades of pink, as well as those of tall, lanky habit, a fault that P. malacoides had when it first came into our hands. In the several last years, we had more than 20,000 in 4-inch pots to select our parent plants from, and consequently we have a strain of seed which is improving each year.

As to culture, cool and damp, and a soil not too much enriched, they do not want rich soil and should not be overpotted. We think 4-inch makes the best stock. Our new white, a sport from the pink malacoides, we think is one of the finest pot plants in existence, and for cutting is wonderful.

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.

IRVINGTON, N. J.

SEEDS AND BULBS

Boddington's

128 Chambers St., N. Y. City

MICHELL'S FLOWER SEED

ASPARAGUS PLUMOSUS NANUS

We have just received from our grower a lot of fine, plump

LATHHOUSE GROWN SEED

1,000 Seed	\$2.00	10,000 Seed	\$18.50
5,000 Seed	9.75	25,000 Seed	43.75

CYCLAMEN SEED

Michell's Distinctive Giant Strain

	100	1000
Duke of Connaught, Crimson	\$1.50	\$12.50
Excelsior, White with Red base	1.50	12.50
Grandiflora Alba, White	1.50	12.50
Princess of Wales, Pink	1.50	12.50
Salmon Queen, Salmon Pink	1.50	12.50
St. George, Delicate Salmon foliage marbled	1.50	12.50
Mixed Colors	1.00	9.00

PANSY SEED

Michell's Giant Exhibition Mixed

A giant strain which for size of bloom, heavy texture and varied colors and shades cannot be surpassed. Half tr. pkt., 30c.; tr. pkt., 50c.; 1/4 oz., \$1.25; \$2.00 per 1/4 oz.; per oz., \$7.00.

Also Giant Prize and Regular

Sorts in Separate Colors.

Also all other seasonal Seeds, Bulbs, and Supplies.

Send for Wholesale Price List if you haven't a copy.

MICHELL'S SEED HOUSE

518 Market St., Philadelphia

HORTICULTURE

Vol. XXX

AUGUST 23, 1919

No. 8

THE BIG CONVENTION UNDER WAY

Detroit, Mich., Aug. 21.—The big convention has been under way for several days and its bigness has grown upon the delegates as they have watched events unfold and moved about among the trade exhibits. The Detroit florists, acting as hosts, are untiring in their efforts to make everybody happy.

The convention hotels are badly crowded, but that was expected, and minor inconveniences are put up with smilingly. The eastern delegates had a good trip coming out. The members of the Boston party had an enjoyable day at Niagara, and on the boat to Detroit were the guests of the New York delegation, the florists having a dining room to themselves.

Every inch of space in the exhibition hall has been taken. It is certainly a good business convention, as everybody seems to agree.

On Tuesday the delegates were welcomed by a representative of the mayor and the response was made by E. G. Hill. The routine work was then taken up, the reports of the committees made and the addresses of the officers delivered.

PRES. AMMANN'S ADDRESS

Members of the Society, Ladies and Gentlemen:

For the very great pleasure it gives me to preside at this meeting I cannot find words. I feel that the honor should be intended more for St. Louis, the community I represent, than for just the individual. Be that as it may, I do want to sincerely and from the bottom of my heart, thank the St. Louis Florist Club for their unanimous endorsement and the members of the Society for electing me to this most cherished and honorable position in the gift of our beloved Society.

We are just now in the first stages, so to speak, of the reconstruction period, after one of the greatest wars ever fought by mankind. We can only grasp the immensity of it when we stop to consider that approximately fifty million men were mobilized for the great conflict; of which eight million are dead; eighteen million are wounded, six million are permanent wrecks and seven million were blown to pieces buried dead or alive, or are prisoners to be worked or starved to

death. Nine million civilians, women, children and ageds have been murdered, starved and slain by disease; just because some war Lords dreamed of a world conquest.

The Society's Past, Present and Future.

And now friends for a brief review of our work of the past, present and future. Thirty-five years ago this Society was organized, as our charter reads, for the development and advancement of floriculture and horticulture in all their branches; to increase and diffuse the knowledge thereof, and for kindred purposes in the interest of floriculture and horticulture.

Let us see how well we have lived up to the precepts laid down for us, by the grand old pioneers of our organization. Statistics speak for the wonderful advancement of both floriculture and horticulture and I shall not burden you with figures on that, at this time.

Knowledge has certainly been spread over this land, creating a love for the beautiful, through the various mediums of our Society. It will not be amiss here to name just a few. The School Garden Committee, under the splendid guidance of their chairman, Mr. Benjamin Hammond have done and are still doing a great work along this line. The American Rose Society, with its long list of both amateur and professional members are spreading the gospel of, "A Rose for every home and a Bush for every Garden," through the publication of their Rose Manual. Time can only tell the results of this great work. Many more active influences in the past, as the National Flower Shows, The Convention Garden and others could be mentioned; but suffice to say that this Society has truly lived up to the mandate of its charter, in the spreading of knowledge of floriculture and horticulture, from its very beginning.

Just now we are in the midst of the greatest campaign of publicity in floriculture the world has ever known. Ornamental horticulture is also coming in for its full share in this great campaign. Aside from the paid advertisements we are getting a lot of valu-

able knowledge before the public through the Promotion Bureau; which material is gotten out in the secretary's office at very little cost to the Society. Of this you will hear more in detail later from the secretary's report; this is just a citation, to show the increase and diffusion of knowledge of the various branches of floriculture and horticulture.

Kindred Organizations.

What about the kindred purposes in the interest of floriculture and horticulture. First of all we have the Florist Hail Association, a product of this Society, organized thirty-two years ago; gives protection to over sixteen hundred greenhouse establishments, with over forty-five million feet of glass insured; has paid out to date over four hundred sixty-five thousand dollars in losses to its members and has at present a reserve fund of over forty-seven thousand dollars. Of course when we think of hail insurance we think of J. G. Esler who has faithfully steered this wonderful by-product along the road of success, from its instillation to the present date.

Next we have the Florist Telegraph Delivery, of much later origin, but such a wonderful growing medium that it too bids fair to vie with the parent Organization in the near future, for numbers in membership. Organized in 1909 has now a membership of over eleven hundred and transmitted by telegraph the past year orders to the amount of approximately one million dollars and the worthy secretary Mr. Pochelon informs me this is bound to increase from thirty to fifty per cent annually.

This is without a doubt the greatest one medium that floriculture has through which to spread the gospel of publicity. We cannot think of this young giant of an organization without bowing our heads in sorrow for the great loss to the trade and to humanity, of its founder ex-president, J. A. Valentine. We, too, are ever mindful of the efficient secretary of this organization, Mr. A. Pochelon, who with untiring efforts has really been the bulwark of its great progress. I plead with every member of our Society to give this wonderful off-

spring all the support you can, by assisting its officers and especially the secretary in putting the retail division of floriculture on a higher plane than ever before, through efficiency and service. You cannot but help in benefiting the entire trade by rendering unselfish service to anyone branch thereof.

In addition to the above named we have numerous other kindred organizations whose origin can be directly traced to this parent society, such as, The American Carnation Society, The Rose Society, the Chrysanthemum, the Sweet Pea, the Peony and the Gladiolus Societies; the latter has its annual exhibition at this meeting and the beautiful variety of blooms shown here I am sure speak for the wonderful progress of this popular summer flower. Each of these kindred organizations have done a vast amount of good and bid fair to even make much greater progress in the future.

Trade Affiliation.

We have covered the past and touched on the present briefly, now let us look into the future just a bit. What this Society needs to boost more than any other one thing, for the future success, is closer trade affiliation. We have in the making one of the finest retail organizations in the world, in the Florist Telegraph Delivery Association. Now we need a National Wholesale and Commission Men's Organization and in addition to this we need a National Growers Organization. These three branches of our trade should be thoroughly organized and through their proper accredited representatives should be represented in the executive body of this Society.

These branches of the trade should not be organized one against the other, as is sometimes the narrow view; but rather for the purpose of better co-operation with one another, for the mutual benefit of all. This can be done and I predict will be done in the very near future.

I just want to briefly call to mind a few topics that even now demand such co-operation. First of all, a credit system is needed for each branch; a standard grading system for both plants and cut flowers. A knowledge of the cost of doing business and cost of production is necessary for the success of either. We also need more complete statistics of the various branches of our business. I could mention numerous other items that we have immediate use for to more successfully carry on our business, but I just name these few for your earnest consideration.

I am glad the retailers have such a good start and I do hope the other two branches of our trade will get busy at once along the same lines.

There need be no fear of so many branch organizations that it might tend to lessen the interest in this the parent society; for rather the opposite has already been proven. Never since our Society was organized have we had so many special interests in



Secretary John Young

various branches of our trade, organized; and yet the parent society is growing in leaps and bounds. This Society is and always will be the medium through which all others can meet on mutual ground.

The Labor Question.

One of the most important reasons for closer co-operation of our trade branches, I forgot to mention above all is that of labor. We all are no doubt beginning to realize that the matter of labor is to be a very important one in the near future. We should have standard working hours. It is not fair for one grower for instance who has his help on the eight hour a day schedule to have to compete with others, working men ten and twelve hours a day. Let us seriously consider this humane side of our profession.

In the last twenty-five years, greenhouse labor was the most underpaid and overworked in this country. Had it not been the love for the kind of work and the lack of competition, in the field of labor, we could not have held men, with the qualifications required, to be good growers or designers at wages and hours maintained in the average greenhouse establishments. Let us not wait until we are

forced by organized labor and public sentiment to solve this problem; let us do it now.

Growers, wholesalers and retailers, let us put our men and ourselves, also, if you please, on the standard American, eight-hour day schedule and let us in reverence to God and for the love of man close our shops on Sunday. Do not say it can't be done, for many instances can be cited where it is now being done and very successfully, too. I know of establishments that even have adopted the five and a half week day program, giving their help Saturday afternoons off; in addition to the eight hour day and Sunday closing.

We can do just what we want and undertake to do in this fair land of ours; just so long as we do not trespass upon the rights of others. That is the definition of our—Free Country—and when all who class themselves as Americans once get that straight, we will need less police protection and the country will be even more a "Land of the Free and Home of the Brave." Oh! let us put humanity first in America and America first in the world.

Recommendations.

I also think we should just as soon as possible put on another national flower show, with our publicity campaign, now in full swing; this show would be a great asset to the work.

May I not plead closer co-operation for all members, with the society in using the dealers helps, and tie up locally with this great publicity campaign. Take an active part in all organization work. Assist the committees in carrying on their work by answering all correspondence promptly. Let us be considerate of the other fellow, who renders service unselfishly. Remember every one who serves on a committee and serves well makes a sacrifice. Its what you put in life that makes it worth while; the more you can do for others the happier your lot will be, for "it is indeed more cheerful to give than to receive." No one who has ever practiced this receipt will deny it.

Our Home Office.

In the Johnston Building, at 1170 Broadway, New York, is located our Administration Office Rooms; here any member of the Society finds a ready welcome at all times.

The work here is growing to such an extent that more help must be constantly added to the office force. Secretary Young is indeed a very busy man and the plan to have him devote his entire time to this work has proven one of the best yet undertaken by

the Society. The publishing of our monthly Journal; the work of the promotion bureau; the handling of the dealers' helps, in addition to the vast amount of correspondence, involves much time and hard work, and yet our worthy secretary has found some time in the last two years to devote to field work, in the interest of the Society and the publicity fund.

We hope under a new plan the publicity committee has now adopted and of which you will hear in their report; our secretary can devote his entire time to office work.

Our membership is now just about three thousand, and at the rate we have increase this year; which was over four hundred annual and two hundred life members; it does seem we are now on the road of progress. No doubt the trade at large is waking up to the importance of the S. A. F. and O. H., as an organization and are beginning to realize what it really means to be a member of this great Society. This also proves that the work of the various committees, such as the legislative, publicity and others, have not been in vain.

This Society is not only growing in membership; but also in ideals and thought. We need the considerate advice of all the members present and we want you to freely enter into all discussions. Just and fair criticism stands for progress, let us have it here and now. Don't go away a knocker, but be a booster. There is an old saying, that a horse never pulls while he is kicking; so don't be like a kicking horse; get hitched up and pull. This S. A. F. & O. H. wagon is loaded full of good ideas and we have a bunch of fine and willing workers to pull it along the road of success and accomplishment. Lets keep it moving.

Bouquets for the Living.

Since we are such great advocates of bouquets for the living, and I sure am one, for I predict the time will be when "please omit flowers" will be a sentence unheard of, because fewer flowers will be sent to the dead and more to the living.

I want to express my sincere gratitude and I am sure I voice the kindest appreciation of the other officers and every layman of this Society by giving our heartiest thanks to the men who so faithfully and untiringly have served on committees, under the leadership of such Knights of Service as W. F. Gude, Henry Penn, George Asmus, Benjamin Hammond and a host of others too numerous to mention. Gentlemen, may your reward be such as we this day feel has come to the great pioneers who nursed this organi-

zation from its infancy and trained it to full grown childhood, from whence it comes to us, with the admonition for righteousness and fair dealing.

We indeed owe a debt of gratitude to the trade press for the many kind favors and the liberal amount of space devoted to our cause, without any compensation; so let us not forget them with our paid advertisements and our patronage in general.



Treasurer J. J. Hess

To the trade exhibitors at our annual meetings, we are in a large measure indebted for the financial expense of the convention. Let us in turn remember them with our liberal patronage, when in need of anything in their line, and with kindly consideration receive their traveling representatives when they call upon us at our various establishments.

TREASURER'S REPORT.

The report of the treasurer, J. J. Hess, follows:

Balance on hand Dec. 31, 1918....	\$7,696.08
Receipts, General Fund	12,951.58
Receipts, Interest	826.17
Receipts, Nat'l. Publicity Camp...	37,369.12
	<hr/>
	\$58,842.95
Disbursements:	
General Fund.....	\$9,381.63
Nat'l. Publicity Camp...	38,828.97
	<hr/>
	\$48,210.60
Balance July 31, 1919....	<hr/>
	\$10,632.35
Balance Permanent Fund Decem-	
ber 31, 1918.....	\$28,612.22
Balance as above, General Fund.	<hr/>
	10,632.35
Grand total balance on hand....	<hr/>
	\$39,244.57
Omaha, Aug. 11, 1919.	

SECRETARY'S REPORT

Some of the important features in Sec. Young's report follow:

It was my pleasure, at the St. Louis convention, to report that in spite of adverse conditions existing for a year or more, our society has made satis-

factory progress. Since that time conditions have, as we all know, changed very materially, and effort to advance our organization in the trade has, in consequence, met with gratifying success.

As the strength of an organization lies mainly in its membership the society is to be congratulated upon an influx of new members since our last convention that might be surprising to some. We have taken in altogether 659 annual members from August 10th of last year to August 10th of this year and our list of life members has been increased by 209. The total membership on August 1st, was 3,025, of which 710 are life members, and 24 pioneer. It is a matter of regret that quite a number of our members have not paid their annual dues for 1919. Not only does this neglect occasion anxiety, but these members prejudice the second class mailing privilege for our "Journal," as we are not allowed to avail ourselves of the low postage rate except to members in good standing. The society is fortunate in having so large a list of life members, inasmuch as the fees in this class are turned into the permanent fund for investment, and yield an annual income indefinitely. The life memberships for the year total an addition of \$5,000 or more to this fund. In addition, we have 24 pioneer members, whom the society has exempted from the payment of dues.

The Journal.

The Journal of the Society which your secretary was, at the last convention directed to publish, has now run through six numbers, and has proved to be of great service in the society's work. Not only is it a medium of communication between the executive board and our members, but much matter that would ordinarily entail special printing and distribution is published in its pages, and attracts far greater attention in consequence. It is also of great service in the missionary work necessary in the interests of the society, and serves to keep members in touch with the various details of the society's work. It has been a great aid to our publicity campaign.

Our Administration Offices.

The wisdom of our executive board in establishing office quarters in New York was amply exemplified during the year just closed. The growth of the society has necessitated a great deal of detail work requiring ample room for its performance. Already, the space available is taxed to the utmost. Very many of our members have found their society's office very

convenient, as furnishing a place for the transaction of business and receiving mail, as well as a communicating point, while visiting New York. It has been used to a great advantage for meeting purposes, affiliated and auxiliary societies also sharing in the convenience.

The Trade Exhibition.

Better evidence that business in the florist trade is on a pre-war footing could hardly be presented than is contained in our trade exhibition of this year. This exhibition has been given an unusual amount of publicity in the trade papers, in the society's Journal, and in a series of about 16,000 form letters which have been mailed over the entire mailing list compiled for the use of our publicity campaign, all with a view of swelling the attendance at this convention, and, inviting interest in the society's work.

NATIONAL FLOWER SHOW COMMITTEE.

Chairman George Asmus presented the report of the National Flower Show Committee.

There are several cities that are desirous of securing this exhibition, some of which have, or are to erect buildings suitable for our purpose. Your committee feels that almost any city in the union with the population of 600,000 or more, is capable of supporting our exhibition.

The complexing question before the committee is the one as pertaining to the exhibits. I have been in touch with the largest growing establishments in the U. S., as well as a number of people who have been exhibitors in the past national shows. I find that there is a very great shortage of the large sized plants that go to make up our exhibitions. Then, too, the extreme scarcity of plants of all descriptions, and the prices obtained for stock, has lead the committee to believe that it would be very difficult to stage our exhibition until this condition changes.

Now until our committee can safely rely on the growing interest in supporting the exhibition as it has in the past, we cannot with any degree of confidence start the wheels necessary for the launching of one of these magnificent undertakings. It would be an ideal time when we are rocking the country from coast to coast with our wonderful publicity campaign, "Say it With Flowers," to have this exhibition blossom out in connection with it, every two years in one of our leading cities of this country.

In making the above statement I am quoting to you the opinion expressed

to me by the various members of the National Flower Show Committee at my solicitation. Therefore it is very important that this convention go into discussion, so that the committee may be somewhat enlightened from the suggestions that will come from the foremost men who are present.

Your chairman believes that the spring of 1921 would be the ideal time for the staging of the next National Flower Show.

Finance Committee.

The report of the finance committee follows in part:

It is my opinion that there has been no work taken up by the National Organization that has meant so much to every person engaged in our industry, and that the campaign as inaugurated by the Society in New York two years ago, has brought results far beyond our fondest expectations.

To those of us who have had in charge the financing of this wonderful project, it has seemed from the results obtained the first year, that we ought to have easily had doubled our first years quota of \$40,000 by this time. Over half of the year has passed and we have now about \$47,000 subscriptions to date. If money subscribed in the same proportion keep up until the end of the year, it is possible that we may reach the \$75,000 mark.

Chairman Penn and his committee are to be congratulated on having contracted with the P. F. O'Keefe Agency. It was Major O'Keefe of this agency who recommended our slogan, "Say it with Flowers," which is acknowledged by the brightest advertising men in the country as the best trade slogan ever known by any commercial industry, and which is rapidly becoming a "by word" to the people of the United States and Canada. I was very much impressed to find that several customers at our retail stores when inclosing a card with flowers, had used our slogan as one of the best expressions they could think of in connection with the gift. All of this obtained with the expenditure of about \$60,000. The enormous amount of advertising matter that is appearing in the magazines show that the advertising brains of this country, are unanimous in their opinion that this medium ranks first. Evidently the magazines are realizing this, as the rates in most publications have advanced from 30 to 100 per cent. This is another reason that there will have to be more money raised if we wish to have the prosperous conditions the trade is now in continue.

Very few men in our profession a

year or more ago thought that there would be any building of greenhouses for some time to come. And yet the greenhouse builders are extremely busy and behind with their work. Considering the high cost of material, this is evidence for itself of the success of the campaign.

Secretary Young has had to bear the burden of this additional work. He has done work that is truly wonderful, and saved the subscribers thousands of dollars. I wonder if the business men in our profession have ever stopped to consider that the solicitation of the fund by mail and otherwise, has cost them quite a few thousand of dollars, where this money might have been spent for advertising space. Articles have appeared weekly in the trade papers pointing out the fact, and yet despite all, the responses have in no way been in proportion to the results obtained.

I wish to point out here a plan of procedure that if adopted where possible, might help solve the problem of equitable plan of assessment, and whereby everybody pays his correct proportion and allows for 75 per cent. of the money so collected to be used in the local community, through the hard and earnest effort of President Ammann.

The St. Louis florists have adopted a plan to charge every retailer purchasing flowers at commission houses for advertising. That is, if the retail florist purchased \$25 worth of flowers, he would be charged 25c. for advertising, the grower to be assessed one-half of the 1 per cent. as his share. The commission house as their share are to be the collectors and distributors to an advertising committee who have in charge the matter of properly using it for advertising purposes. Twenty-five per cent. of this fund is to go to the National Publicity Campaign. The balance to be used locally. This method has also been used in the City of Milwaukee, where the results were so great and the increase in the business so noticeable that the amount assessed was doubled, the only difference being that they have not as yet decided to give 25 per cent. to the National fund. Everybody pays exactly alike and in proportion to the amount of business done, and it is surprising with ever so small an assessment the amount obtained run into thousands of dollars.

At the last joint meeting of both of our committees held in Cincinnati, it was decided that the railroad traveling expense of the two committees was a very great expense, and I suggested that the National Finance Pub-

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licity Committee, of which I am chairman, be abolished. After considerable discussion, President Ammann, who presided at these committee meetings, secured an expression from all of the members present, and it was the unanimous opinion that one committee should handle the entire work, working on similar lines as the National Flower Show Committee work, one man retiring each year. There will always be on the board men of from four to five years experience in the handling of the campaign.

Each member of the committee could be delegated a certain department to take care of. You are all aware that the principal work must be done by the Secretary and office force, and suitable appropriations must be made to establish a methodical and systematic method of procedure. If there were only five members to be considered in calling a session of this important committee, they could have a meeting more often, and, of course, results obtained would be better. And at the conclusion of my report I am going to offer to the committee a resolution that will make this effective at the end of this year.

I pointed out to you the danger of having an appointive committee whose term expires each year, in charge of such an important work. At a recent joint meeting of the various trade interests in Chicago, the Wholesale Growers' Association of Cook County proposed a bill board campaign, having in view the easy matter of obtaining sites for the erection of bill boards, with nothing but our slogan, "Say it with Flowers," through the country. They offered to erect boards at their own cost. There are any quantity of locations where greenhouse plants are, and where the railroads pass and automobile traffic is heavy, and you can imagine what an addition to publicity could be gained by the thousand of billboards all over the country with our slogan, "Say it with Flowers." I am about to inter-

view with one of the largest billboard agencies in the country and perhaps may have something further to say on the method and cost at this time.

The following is the brief summary in total of the financial condition of the campaign up to August 1st:

Total amount of fund.....	\$42,068.50
Of this amount there has been collected	35,518.75
Balance due and unpaid....	6,549.75
Cost of magazine advertising up to date of this year....	24,933.24
Drawings, plates, etc.....	2,187.81
	<hr/> \$111,258.05

THE CANADIAN CONVENTION

**E. B. Hamilton Elected President—
Retailers Organize**

The Canadian Horticultural Association has just concluded a four day convention in Toronto (August 12-15), which proved to be one of the most interesting and important in the history of the association. The attendance was large and unusual interest taken in all the proceedings.

The most important feature of the convention was the formation during the Wednesday session of a Canadian Retail Florists' Association by the retailers present. The officers of the new association are: President, Geo. M. Geraghty, Toronto; first vice-president, V. McAlpine, Sudbury; secretary, Silas McFadden, Toronto; treasurer, Mrs. Percy Waters, Toronto. Board of directors: H. G. Dilleuth and J. J. Higgins, Toronto; F. G. Dicks, London; F. Smith, Hamilton; Frank McKenna and Mrs. Hill, Montreal; A. R. King, Winnipeg. This association will be affiliated with the Canadian Horticultural Association as soon as the constitution of the latter is amended.

The elections for the Canadian Horticultural Association resulted as follows: President, E. B. Hamilton, London; first vice-president, W. E. Groves, Hamilton; second vice-president, C. J. Hay, Brockville; secretary-treasurer, H. J. Eddy, Westmont, Que. Execu-

tive Committee for three years: W. C. Hall, Montreal; S. Jordan, Peterboro; S. McFadden, Toronto. One year: L. Williams, Ottawa; V. McAlpine, Sudbury; W. Cotter, Montreal. Two years: H. J. Moore, Niagara Falls; A. Walker, St. Anne de Bellevue; C. Craig, Ottawa.

Another important action taken was the appointment of a plant registration committee. Mr. H. J. Moore gave a valuable paper on the necessity for plant registration in Canada. As a result, a committee consisting of H. J. Moore, John Dunlop and W. E. Groves was appointed with power to secure co-operation from the fruit growers and vegetable growers' association. This will probably result in speedy action being taken for the development of a systematic method of plant registration in Canada which is badly needed at the present time.

The question of giving greater support to the S. A. F. Publicity Fund was also strongly presented to the convention by visitors from the United States J. F. Ammann, president of the S. A. F., John Young, secretary, Philip Breitmeyer and Albert Pochelon of the F. T. D., and later by Mr. W. W. Gam-mage of London, Ont.

MRS. SARGENT PASSES AWAY.

It is with deep regret that we record the death of Mrs. Sargent, wife of Prof. Sargent, director of the Arnold Arboretum. Mrs. Sargent passed away last week and the funeral was held on Monday of this week. As a bride Mrs. Sargent came to Holm Lea, the beautiful Sargent estate in Brookline, and she delighted in her home. She spent much time, however, traveling over this country and in foreign lands in company with her distinguished husband when he was engaged in research work. She was a talented artist and a woman of many fine qualities. Prof. Sargent has the sympathy of a world-wide circle of friends.

HORTICULTURE

Established by William J. Stewart in 1904

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A big convention

AS HORTICULTURE is being printed, the closing sessions of the S. A. F. Convention at Detroit are being held. It has been a big, important and successful convention. The Detroit florists have proved to be the most delightful of hosts and have done everything in their power to make the visit of their guests an enjoyable one. Perhaps never before have the members of the society come to realize so keenly the tremendous amount of work which devolves upon the officers of the society, not only in arranging for a big convention like this, but also the routine and special work of the entire year. The labors of Secretary Young have been little less than Herculean and he certainly deserves all the bouquets which have been thrown at him the past week. A fast pace has been set for the new officers, but HORTICULTURE feels certain that they will acquit themselves with credit and steer the organization through another year to an even greater degree of prosperity. HORTICULTURE voices the feelings of its readers in wishing them every success and in pledging whole-hearted support.

A balance wheel

An experiment which has been tried with little or no success in many parts of the country is a flower growers' association. It has flourished for a little in nearly all the large flower growing centers, only to drop out after a time. Too much difference of opinion in how to market the stock and too much variation in quality of stock produced have caused troubles to arise among the growers and upon the manager of such a corporation devolves the difficult task of keeping every one satisfied as well as showing a financial profit at the end of the year. The Chicago Flower Growers' Association was organized eight years ago with a large membership but at the end of two years was at the point of abandoning the project as a failure. The management was then undertaken by an entire stranger, Paul Klingsporn, formerly of Philadelphia, who for six years has done won-

ders in keeping things running smoothly. This association is now the most successful of its kind in this country. Mr. Klingsporn, who will be 40 on his next birthday, when pressed for a reason for this success, modestly admitted that it was the ability of its manager to be a "balance wheel." There are lessons to be drawn from the work at Chicago which might well be taken to heart by growers in cities where similar organizations have not been a success.

A flower week

The florists of Washington are a lot of live men. There is no necessity of making such a statement to the trade, but it is called forth by the announcement that a "flower week" is now being projected for the early winter. This is a departure which promises much. The plan is one which might well be considered in all of the large cities. Such a week, coming at the close of the season of outdoor flowers, will find the public in a receptive mood and willing to be tempted to purchase more flowers than under ordinary circumstances. There should be a good advertising campaign in advance, and special attention should be given the decoration of windows. Let the idea roll along over the country.

Choice Irony

If the members of the Federal Horticultural Board think that the sentiment against Quarantine No. 37 is going to rapidly disappear, as they seem inclined to intimate, they are greatly mistaken. The more horticulturists think about the matter, the more disgusted they become. There is a choice bit of irony in the following letter which was sent the board by Mr. Faulk of the Bloodgood Nurseries and which HORTICULTURE is glad to reproduce:

Federal Horticultural Board, Dept. of Agriculture, Washington, D. C.

Dear Sirs:—Returning recently from Canada our car was invaded just out of Montreal by a swarm of flies or winged ants. I am not an entomologist and could not identify them. Some of the flies or ants were in the car when it reached the Grand Central Station, New York City, ten hours later. The thought that occurred to me was that probably harmful insects may reach America through other channels than by the importation of nursery stock with or without balls of earth adherent thereto. To obviate the danger it is suggested that another quarantine or embargo be proclaimed at once interdicting international travel. This suggestion is offered that you may take steps immediately to guard American interests and incidentally the civilization of the world which may also suffer an eclipse. It would be interesting to know what harmful insects your department has kept out of the country by your activities. This is an open letter to the Federal Horticultural Board and we hope will have a prompt acknowledgment, preferably through the press where this letter will be offered for publication. Make the best case you can and proclaim to the world the results of your labors.

The Brown Tail Moth is reputed at the present time to be almost if not quite the most harmful of recently imported pests. There is a story current that it was introduced by a scientist in the neighborhood of Boston some years since who imported the insect specifically for study and experiment. This is a rather ugly story and we are loathe to believe it and we respectfully request that you affirm or deny its accuracy.

Very truly yours,
 BLOODGOOD NURSERIES.

By THOS. FOULK.

THE GARDENER'S SECTION

PROGRAM FOR GARDENER'S CONVENTION.

The annual convention of the National Association of Gardeners will be held at The Hollenden, Cleveland, Ohio, August 26-28. The program in full is as follows:

Tuesday, August 26.

- 11 A. M. Executive meeting of trustees and directors.
- 2 P. M. Convention convenes.
Address of welcome.
Response by ex-president Thomas W. Head.
President's address.
Secretary's report.
Treasurer's report.
Report of committees.
Communications and resolutions.
Consideration of next convention meeting place.
General discussion.
- 8 P. M. Illustrated lecture by J. Otto Thilow of Philadelphia on "The Flora of Wakail."

Wednesday, August 27.

- 9 A. M. Unfinished business.
Nomination of officers.
Address. "How Can the Gardener Best Advertise His Profession?" by Sidney S. Wilson, vice-president of Associated Advertising Clubs of the World.
Consideration of the proposed co-operation between the country estate owners and the national association.
General discussion.
Luncheon.
- 2 P. M. Visit to some of the fine country estates of Cleveland.
- 7 P. M. Banquet.

Thursday, August 28.

- 9-9:30 A. M. Polls open for election of officers.
Unfinished business.
Address, "How Can We Arouse the Interest of the Young Men Towards Our Profession?" by Edwin Jenkins of Lenox, Mass.
Consideration of providing gardeners' examinations and the management of the Service Bureau.
Discussion of Quarantine Bill No. 37.

Address. "The Future of American Horticulture," by Congressman M. L. Davey, Ohio.

Final resolutions.
Luncheon.

3 P. M. Bowling tournament.

Members intending to attend the convention should write to James Fisher, Chairman of the Hotel Reservations Committee, 10,504 St. Clair avenue, Cleveland, for hotel accommodations without delay, other conventions



President Robert Weeks

being held in Cleveland on the same dates as ours, will make it difficult to secure accommodations unless engaged in advance. All members who can possibly arrange to attend the convention should make every effort to do so, as important business is to be brought up to be acted upon.

ANTS OF MANY KINDS.

All ants, with the exception of the white ants or termites, belong to the order Hymenoptera with the sawflies, bees and wasps. Ants are wingless insects, although at times winged forms may be found. These are the males and females. The males soon die and the females tear off their own wings. Ants live in colonies, have a queen, workers, fighters, etc., and are considered to be very highly developed, more so than any other insect.

Usually one or more species of ants can be found running up and down a tree. The most of these are harmless to the tree although one species, the carpenter ant, sometimes is very in-

jurious. It is necessary that they find an opening before they can enter a tree, but once they have entered their tunnels and excavations may extend several feet.

These carpenter ants are the largest of our native species and can be easily recognized from their black color and size of half inch or more. With their jaws built for excavating they can give one quite a pinch.

There is only one sure method of control and that is to dig to the end of their tunnels, remove all insects and treat the cavity in the usual way. The ants might be killed by fumigation but if the cavity is not treated the result will be a structurally weak tree.

White ants may sometimes be found working under the dead bark or in basal cavities. They are more common in the South although they have been reported as far north as Ohio and Massachusetts. They appear to work only in places where there is a direct connection with the ground. They are often very serious in posts and foundation timbers of buildings.

THE DAVEY TREE EXPERT COMPANY
W. O. Hollister, Entomologist.

July 17, 1919.

KEEPING FLOWERS FOR HOME DECORATION.

How often one goes to an entertainment and sees the beauty of the floral decorating spoiled because the flowers have wilted. This trouble can be largely avoided if the flowers are gathered the day before and placed so that their stems fill with water.

In arranging flowers for home decoration if they are placed in the vases in which they are to be displayed on the previous day, not crowded in a vase but left so that the flowers can adapt themselves to their situation, then sprayed with the atomizer so that the water comes as a light mist on them, and then put away over night where they will get no draught, in a dark cellar closet or in a tub covered with towels, their appearance at the lunch or dinner table will be much fresher and more beautiful than if they were arranged an hour before the occasion for which they are needed.

The ability that flowers have for adapting themselves to the situation seems almost as some people think, as if they were sensitive beings. Take a bowl of nasturtiums where the flow-

ers have faded, notice the stems before you throw them on the humus pile where they go to help other flowers to bloom again next year, you will no longer find the stiff, straight stems which you had such difficulty in arranging gracefully in your bowl. No, the stems are all twisted about like a corkscrew, for the flowers have adapted themselves to one another so that they became a beautiful united whole.

Hillcrest Farm.

M. R. CASE.

NASSAU COUNTY, N. Y., HORTICULTURAL SOCIETY.

The annual basket picnic of this society was held at Appleby's Grove on Friday, August 6th. There was a large attendance and competition in the various sports was keen and exciting. Everyone thoroughly enjoyed themselves and are already looking forward to our next. Quite a number of the old school surprised the younger blood with the fleetness of foot but had some satisfaction in knowing the penalty was paid the following day. The executive committee are to be congratulated on the arrangements made. The ice cream, soft drinks, milk for the visiting generation, and upon Mr. Twig's recommendation, a limited quantity of 2.75 was in great demand and met the various needs of all. Among the many features of the day the tug-of-war seemed to be the leader. John W. Everitt and Sanitas Disinfectant Wild chose the contesting teams. There was keen friendly rivalry with the heavies in great demand. The result was a foregone conclusion when our worthy president was found securely tied alongside of Andy Wilson to Sanitas D. Wild's end of the rope. John W. Everitt, assisted by John F. Johnston and Ernest Westlake, deserves great credit for the able manner in which each event was carried out.

The monthly meeting was held on Wednesday, August 13. President Joseph Adler in the chair. Five petitions for active membership were received. For the monthly exhibits the judges made the following awards: 12 gladioli, 1st Wm. Milstead; 12 mixed Asters, 1st A. Fournier; 6 tomatoes, 1st Frank Petroccia; vase of King Asters, awarded certificate of merit to A. Fournier.

Competition for the next monthly meeting, to be held on Wednesday, September 10, are: One outdoor melon, 3 sticks of celery and 12 best potatoes.

HARRY GOODBRAND, Cor. Sec.

TULIPS FROM SEED.

Question—Will you kindly tell me in HORTICULTURE, how to grow tulip from seed.—Subscriber.

Answer—Tulips are comparatively easy to grow from seed. The seed resembles that of the lily and it should be treated similarly. Personally I prefer to sow the seed in autumn under conditions which will insure a constant supply of moisture and at the same time perfect drainage. In the East, this had better be done in a cold frame. On Puget Sound, it is perfectly feasible to drill tulip and lily seed in the open ground in autumn in well tilled soil. But here the surface of the soil does not dry out completely from October to May. In the East, ordinarily provision must be made for insuring the soil from becoming dry. However, I frequently have tulips volunteer from seed in my garden in the District of Columbia.

We usually plant one-half to three-quarters inch deep in drill six inches apart. The bulblets may be lifted after the foliage dies down as is always advisable with old bulbs, but this is tedious and the bulblets are likely to be lost in large measure. It is therefore often advisable to leave them in the seed bed two years. If this is done careful attention should be given to supply fertilizer the second year. This can be done with bonemeal or well decomposed barnyard manure. Indeed a light feeding after the foliage is well developed the first season will be beneficial. After the foliage dies the second year the bulbs should be lifted and given more space. Do not keep them out of the ground too long. I prefer to dig rather late, say late July and plant again immediately. Lift and replant each year.

A covering which will prevent the heaving action of frost would be advisable for two or three years at least, but with this the grower must exercise great care and attention. Any straw material should be completely removed from the beds before growth begins. It would probably be better to use burlap which has been sterilized with formaldehyde and then dried.

The occasion for caution here is due to the fact that ubiquitous organism, botrytis, the cause of the fire disease in tulips, develops naturally on almost any decomposing organic material, especially on straw. For this reason clean culture is usually safer with tulips. However, this is largely a matter of location. I would not hesitate to use a rough mulch on tulips in the District of Columbia, but I

should not think of using it under the humid conditions of Puget Sound. Many varieties of Darwins are particularly susceptible to this disease.

Very truly,

DAVID GRIFFITHS.

Bellingham, Washington,

August 10, 1919.

COMING MEETINGS AND EXHIBITIONS.

Cleveland, O.—National Association of Gardeners, summer meeting, M. C. Ebel, Sec., Aug. 26-28.

New Haven, Ct.—American Association of Park Superintendents, Jacob F. Foster, Chicago, President, August 26-29.

Cincinnati, O.—American Association of Cemetery Superintendents, W. B. Jones, secretary, Highwood, Pittsburgh, Pa.

Detroit, Mich.—Vegetable Growers' Ass'n of America, annual convention, Detroit, Mich., Sept. 9 to 13. Sec'y, Sam. W. Severance, Louisville, Ky.

Hartford, Conn.—Conn. Hort. Society Fall Flower Show, Sept. 9, 10 and 11. Sec'y, Alfred Dixon, Wethersfield, Conn.

New Haven, Conn.—New Haven County Hort. Society, annual fall show, Sept. 30 and Oct. 1.

New York City.—The American Institute and the American Dahlia Society, exhibition of dahlias in the Engineering Bldg., 25-33 West 39th St.,

Sept. 23 to 25. Sec'y, William A. Eagleson, 322-24 West 23rd St.

New York City.—The American Institute and the Chrysanthemum Society of America, exhibition of chrysanthemums in the Engineering Bldg., 25-33 West 39th St., Nov. 5 to 7. Sec'y, William A. Eagleson, 322-24 West 23rd St.

Providence, R. I.—Rhode Island Hort. Society, flower show, Sept. 13 and 19; chrysanthemum show, Nov. 13 and 14. Sec'y, Ernest K. Thomas, Kingston, R. I.

San Francisco, Cal.—Dahlia Society of California, fall show at the Palace Hotel, Sept. 4, 5 and 6.

Ardmore, Pa.—Exhibition of dahlias, outdoor cut flowers and vegetables of the Pennsylvania Horticultural Society, Sept. 16-17. Sec'y, David Rust, 606 Finance Bldg., Philadelphia.

Newport, R. I.—September exhibition of the Newport Horticultural Society, Convention Hall, Newport Beach, Sept. 3-4.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

Some of the things which Mr. E. G. Hill told his audience of commercial growers at the convention of the American Nurserymen's Association might well be passed on to private gardeners and to amateurs. Take for example this sentence: "If I wished to make friends for the rose, I should recommend to novices the dwarf Polyantha type. These roses invariably succeed under even adverse circumstances." Now, isn't this just exactly what the average rose grower the country over is looking for? Of course, the dyed-in-the-wool rose grower will not be satisfied with flowers of this type alone. He will want the splendid hybrid teas and some of the hybrid perpetuals, even though they are a little less generous with their flowers and require a little more coddling for best results.

There are some of the baby ramblers, though, that are exceedingly satisfactory, both for the suburbanite who doesn't pretend to know much about rose culture but who likes to see flowers all the summer through, and also for the man with a large estate who can plant these roses in large beds for mass effect.

I have been watching a plant of the Polyantha rose known as Echo in a neighbor's garden this season. It is an exceedingly dainty little rose and as near everblooming as any plant can well be. Even a single bush beside the door would be a delight to the owner of a cottage home. Roses of this type are perfectly hardy and if given anything like decent care will bloom until the buds are killed by hard frosts. In the middle states this may not be until Thanksgiving time. Among some of the varieties which Mr. Hill recommends are Mme. Levassieur, Mrs. Cutbush, Katherine Zeimit and Clotilde Soupert. The last named is a pretty little blush rose but unfortunately the buds are ruined every time there comes a rain storm, which is unpleasantly often in many seasons.

While many people buy the hybrid teas with the expectation that they are going to bloom right through the summer, there are few of them which produce more than an occasional blossom during the latter part of July and the first of August. As a grower and seller of roses, Mr. Hill admits that after the flush of June blooms

has passed there invariably comes an interval of rest lasting until the cooler nights which herald the approach of autumn. It is at this season perhaps that the baby ramblers are appreciated most keenly. It is interesting to read over Mr. Hill's list of the best twenty-five hybrid teas, a list made up, as he says, after a most careful scrutiny of the fine collection in the trial gardens at Washington, and other noted collections. Apparently this list has been made most especially with reference to bedding out, the matter of fragrance and cut flower value being given less consideration. At any rate here it is:

Radiance, Red Radiance, Lieutenant Chaure, Hoosier Beauty, Gen. MacArthur, Gruss An Teplitz, Geo. C. Waud, Janet, Indiana, Lady Ursula, Lady Ashtown, Mme. Caroline Testout, Konigin Carola, Mrs. Wakefield, Christie Miller, Mme. Jules Bouche, Lady Alice Stanley, Killarney Queen, Ophelia, Mrs. A. R. Waddell, Mary, Countess of Ilchester, Robin Hood, Columbia, Los Angeles, Duchess of Wellington, Dorothy Page Roberts.

In his report at the convention of the S. A. F. at Detroit this week Mr. Gude, the Washington representative, emphasizes the fact that the rose garden at the capital is not intended primarily to be a show place, but is purely a test garden, its one object being to bring out the faults as well as the virtues of all the new varieties. This will answer some of the criticisms which have been heard in the last year or two. Perhaps it will also stimulate the making of rose gardens in other places where the general effect will be the point most considered.

I have been interested to find that even Minneapolis has an excellent municipal rose garden, where is grown all the roses which will endure the rather harsh climate of that city.

No doubt the exigencies of the work make it necessary to arrange the rose garden at Washington in its present form. Still one regrets that it cannot be made more beautiful. Sometimes it is possible to combine a test ground with a landscape effect, as has been done at the Arnold Arboretum. Where trees and shrubs are the subject, perhaps this result is easier to obtain.

Last week I had something to say

about the catalogue makers who have departed from the beaten track and commenced to blaze a new trail. The pioneer in the instance mentioned was a seedsman. I wish to say a word now about a nursery firm who has also got the spirit of adventure, so to speak, and produced a catalogue, or rather a series of catalogues, quite different from anything else of the kind ever put out. I refer to the Hicks Nurseries. Isaac Hicks has never been afraid to strike out in any direction, as will be testified by all who know what he has done in the way of making possible the transplanting of large trees.

The Hicks Nurseries have one large catalogue, which while having several unique features, is somewhat along the conventional lines. In addition, they have a series of smaller catalogues devoted to specific subjects, as for example, Foundation Planting, The Use of Evergreens, and so on. These little catalogues, or as they might perhaps be called brochures, have dainty well colored illustrations which accompany the text which show the reader just how the plant, flower or fruit will appear in his garden. The text is put up in such a way that any special information which may be desired can be found almost in a moment's time.

One finds himself reading these catalogues or booklets with interest and pleasure, even though he has no thought of placing an order. The chances are good, though, that by the time he has finished he will run across something which appeals to him as just what he needs to make his garden complete. A catalogue of this kind does double duty. It not only lists the particular plants for which a customer may be searching, but it leads him along flowery paths until it convinces him that his garden is far from complete because it lacks the certain things which are pictured and described in such an alluring way. At the same time there is no attempt at exaggeration and no extravagant claims. Consequently there can be no feeling on the customer's part of having been misled or taken in.

Of course I am looking at the matter entirely from an external viewpoint. I know nothing about costs or rates. Whether it pays to get away from the stereotyped catalogue form is a question for the nurseryman and the seedsman to consider. It does seem quite reasonable to believe, though, that if the making of catalogues is to be revolutionized, as some people in and out of the trade predict, then those who are among the first to start will reap a sure reward.

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and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
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Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

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St. at Cumberland.

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son Co.

Toronto, Can.—J. H. Dunlop, 8-10 West
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CONFERRING ON THE CORN BORER

A conference of the National Association of Commissioners of Agriculture with state entomologists and representatives of the United States Department of Agriculture will be held on the "European Corn Borer" at Chancellor's Hall, State Education Building, Albany, N. Y., Tuesday, August 28, 1919, at 9 a. m., and at Room 136, State House, Boston, Mass., Friday, August 29, 1919, 9 a. m.

On Thursday evening, August 28, a conference of the Commissioners of Agriculture will be held at the Department of Farms and Markets, corner State and Lodge streets, Albany, N. Y.

On Thursday evening there will also be a general conference of attending entomologists held in the Library School Room No. 323, Education Building, at 8 p. m.

A hearing was recently held to consider the guaranteeing of Massachusetts and the decision will be announced after the conference mentioned above.

IT IS EDITOR ROBINSON.

We have just received a copy of the National Match News and find it of particular interest because of the fact that its editor is H. M. Robinson, son of Henry M. Robinson, the well known wholesale florist. The paper is not, as one might suppose at first sight, devoted to the interest of match manufacturers, but is a daily newspaper given over exclusively to the promotion of rifle practice in the United States and the dissemination of official information concerning the national rifle matches of the year 1919. The paper is published at the naval rifle range, at Caldwell, N. J. Mr. Robinson is well fitted for his position. He saw service in the navy during the world war, so that he is familiar with naval matters, and he has received a thorough journalistic education, having taken a course at Columbia University.

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NEWS AND COMMENT

NEW ENGLAND NOTES.

A flower show is to be given by the Lawrence, Mass. Horticultural Society in City Hall, Sept. 5 and 6.

Joseph J. Comley has given up his flower store at Newburyport, Mass. and will conduct his business from his Amesbury office.

The mayor of Boston, Mass. has re-appointed James B. Shea as chairman of the park and recreation commission at \$5,000 a year for a three-year term.

William N. Estabrook, florist, of Worcester, Mass., is having an extension built on his greenhouse on Holden street, which will cost about \$3000. It will be of concrete, glass and wood construction, and will give more ground space for an increase of Mr. Estabrook's flower growing business. He will act as his own contractor.

The Buxton greenhouses of Nashua, N. H. have been incorporated with a capital stock of \$25,000, the incorporators being George E. Buxton, Charles V. Kimball, Dwight G. Smith, Edwin Morey and John R. Spring, all of Nashua.

The engagement of George H. Maloon, a florist of Portsmouth, N. H., to Miss Ethel Pearl Wood of Clinton, Me. is announced.

Saturday afternoon a fire broke out in a small corner room on the first floor of the two-story office building connected with the N. W. Hunter & Co.'s greenhouses on Warren street, Peabody, Mass., and spread quickly throughout the building, sending forth a great cloud of heavy black smoke. On the second floor was stored a lot

of ribbon, boxes, wire forms for designs, paper and all materials used in the business, all of which went up in smoke. The loss will reach over \$2000 and is only partially covered by insurance. Fortunately the fire did not impair the facilities of the concern and business was resumed on Monday. N. W. Hunter & Co. are successors to J. M. Ward & Co.

The will of the late Arthur Estabrook of Boston leaves \$50,000 to the Massachusetts Horticultural Society to be paid at the death of Mrs. Estabrook, who has the use of the money during her life time.

NEW YORK STATE.

N. H. Loomis, formerly of Rochester, has purchased the Krembles Flower Store at Waterloo, Iowa.

G. E. M. Stumpp has purchased the North Sea Gardens, including store and greenhouses, formerly owned by James Guylfoil on the North Sea road, Southampton, L. I. He has also purchased 15 acres of land for a nursery.

John A. Jacobson, son of Peter Jacobson, the well known grower of Elmhurst, L. I., is back from France where he served in the motor transport corps of the American army.

Binghamton is soon to have a new flower store to be known as the Flower Shop. The store will be conducted by Stanley G. Barnes of Pittsfield, Mass., and he will be assisted by Harry Knaust, also of Pittsfield. It is understood that Barnes formerly was connected with flower store of Max Schling of New York.

PHILADELPHIA.

Fred H. Howard, of Howard & Smith, Los Angeles, Cal., paid Philadelphia and Riverton a flying visit on the 12th inst. on his way home from Europe. He seems to have been well received "over there," judging from this clipping from an English trade paper:

Mr. Fred H. Howard, of the firm of Howard and Smith, Los Angeles, California, U. S. A., was a visitor to our London office on July 28th. Mr. Howard has been in Europe a few weeks, having been elected as a juror at the Bagatelle Rose Trials. During a brief stay in England he has managed to see a large number of the best establishments, especially those devoted to roses and to popular and serviceable hardy annuals. Mr. Howard holds a high opinion of the British standard of horticulture and is ready to admit that our plant breeders produce many things America is glad to buy. There are, nevertheless, some things the U. S. growers can supply us with which should be welcomed either for market or private trade, and Mr. Howard is intending to keep in touch with us, which we trust he will do to the mutual benefit of both his and our circle of horticulturists." — *Horticultural Trade Journal* (England), July 30, '19.

Recent visitors have included Fred H. Howard, of Howard & Smith, Los Angeles, Cal., and Mr. and Mrs. Schiltz, Charlotte, N. C.

There was some improvement in market conditions last week especially towards the end. Asters improved in quality and the good stock brought excellent prices although there was still considerable of low grade stuff and these were hard to sell at any price. Gladioli got over the glutty con-

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A Speciality.....

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Growers of

CUT FLOWERS

Prices
As
Low
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Others

Try Us On a Rush Order

We are in daily touch with market conditions and when a decline takes place you can rely upon orders sent us receiving such benefits.

dition considerably and assumed a healthier tone.

There was little change in the rose market except in American Beauty, of which there were quite a few nice flowers coming in. While Killarneys were on the scarce side and more of these could have been used. Dahlias are in evidence in considerable quantity, and some nice yellow chrysanthemums of the Golden Glow variety are to be seen.

CHICAGO.

The 300 miles or so which lie between Chicago and Detroit afford an ideal two days' auto trip which was taken advantage of by a party of six, who with their cars filled, left at 9 a. m., Sunday. The party consisted of Paul Klingsporn, manager of the Chicago Flower Growers' Assn., Geo. Ball, Glen Ellyn; Wm. Kyle, Fred Stielow, Niles Center, Rudolph Ellsworth and Chas. McCauley. Among those who went by auto individually were Allie Zeck, Pres. of the Chicago Florists' Club; P. J. Foley, Pres. of the Foley Greenhouse Manuf. Co.; Guy French, E. C. Amling, H. N. Bruns.

In the death of Arnold Ringier the Chicago trade lost a man prominent for over a quarter of a century in the seed trade. He was associated with

W. W. Barnard as a salesman for 27 years and through his ability in that line and his aptitude for making and keeping friends he became one of the best known men in the middle west.

Feeding the soil is one of the big topics of the day, with all that the soil produces selling readily at high prices. The fertilizer dealers are by no means slow in preparing for this demand. A new organization is the Proto-Feed & Guano Co., of 4121 S. La Salle St. Its president is H. E. Humiston, well known to the trade and one of the best horticulturists in the middle west, having been a private gardener and greenhouse manager he understands their needs. This company features a special vine and plant manure also pulverized plant manure, for private places and for commercial growers. Mr. Humiston has also had experiences in fertilizer manufacturing.

The Pulverized Manure Co., 34 Union Stock yards, have supplied the trade with a high quality of pulverized or shredded sheep manure for over twelve years and their Wizard Brand is known all over the country, as of an extra high grade, dried and sterilized in high temperature direct heat that kills weed and grass seeds. Manager Dwight L. Harris is a genial and progressive young business man, always

ready to talk fertilizers with those who want to know more on the subject of what their soil needs and is invariably found at his office.

The Chicago Feed & Fertilizer Co., was organized six years ago and has grown steadily. With new equipment both quality and production are again raised this year, and their Magic Fertilizer has made an enviable reputation with all classes of growers. The manager R. M. Voorhees is an expert in fertilizer and horticultural lines. Analysis of the soil is made at cost so those who are new in the growing line or have taken a new piece of land and are not certain what they need can easily find out and not waste time and money taking chances on what their particular kind of soil needs.

The Foley Greenhouse Manuf. Co. has recently completed a new range of greenhouses for Frank Oeschlin at his Harlem avenue place. The company is taking in one member of the family after another as they become old enough. Philip, Jr., is now vice-president, James B., secretary and treasurer and a daughter, Loretta, is in charge of the down town office.

Mr. and Mrs. P. J. Foley and P. J., Jr., crossed Lake Michigan Saturday night and left the following day with their auto for Detroit.

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30 EAST RANDOLPH ST.

TIMELY GREENHOUSE WORK.

If you are fortunate enough to get any Easter lilies this year pot them up as soon as possible. The bulb situation is so uncertain that the number of lilies planted in private greenhouses will be greatly reduced. Commercial growers will necessarily be short too. A rich compost is needed for these bulbs and they do best in six or seven inch pots. After you have put them all in cold frame, cover them with five or six inches of soil, but don't allow them to become too wet. Before the first of January they can be brought inside and given a place on the bench where the temperature will run about 50 degrees at night. Good bulbs of Bermuda lilies are coming in now and with all lilies, the quicker they can be potted up the better. Be sure that you have your compost ready when time for the work comes.

There promises to be a big demand for carnations the coming year even though there has been a tendency to

substitute other flowers under some circumstances. It is necessary to go over the beds every day and apply water if the ground is dry. It isn't too early to begin thinking about the supports which your carnations will need when the benches are full. It certainly pays to start the carnations right, giving them plenty of air and sunlight. You can't expect to get good results from plants that were stunted in the fall.

This is also a very good time to prepare the soil for the benches. Of course your compost is already at hand, but be sure that it is turned over and well broken up. If it isn't finely chopped the ingredients will not be properly mixed. Florists like other growers are finding it difficult to get enough barnyard manure, although of course that is the ideal fertilizer, and so far as possible should be used when the compost is made up. If you can't get it in sufficient quantities you can use bone meal or tankage at the rate of fifty pounds to the yard of soil.

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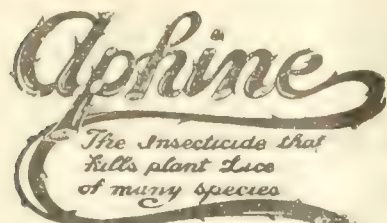
The House for Quality and Service
ZECH & MANN
 We are Wholesale Florists Doing
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 30 East Randolph Street, CHICAGO

Apparently mignonette is to be planted freely this fall and some very good seed is being offered. Mignonette needs a good compost similar to that which is required for carnations. Remember that mignonette needs a cool, moist foundation soil. You can't expect it to thrive on benches below which there are heating pipes. At any rate the soil should be made as fine as possible and an extra effort made to get rid of all weed seeds by working it over several times. Mignonette is a very good crop for a cool house, one where the winter minimum is about 49 degrees at night. There must be plenty of light, though, and no lack of water. When you come to transplant mignonette to small pots be sure that they are well soaked.

Freesias of course need to be started early, as they take considerable time for maturing. Paper-white bulbs seem to be in fair quantities, and doubtless will be planted pretty freely this year owing to the shortage of many other bulbs. There are markets in which the Paper-whites do not sell

very well, and being easy to grow are often a drug on the market in large cities, but for the country florist will make an ideal flower, being useful for several purposes and being appreciated by customers. It isn't necessary to keep the bulbs of Paper-whites in the dark until the tops develop, as with tulips and hyacinths. At the same time it is better to keep them a little darker than is necessary for freesias. Many growers put the bulbs in flats and stack them one above another almost to the ceiling in some secluded corner of the potting shed or some other place on the plant where the light is not strong. Sometimes they are placed in a frame and left out until the end of September. They root quickly and grow rapidly so it is easy to have them blooming in November. They force nicely in a temperature from 55 to 60 degrees.

Watch your primulas to see that they do not become potbound and remove yellow flowers as fast as they appear. The kinds which require special attention are the strong grow-



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ing *P. malacoides* and *P. kewensis*. A mixture which has been recommended for primroses is made of three parts fibrous soil, two parts of old cow manure and two parts of leaf mold with a little sand added. Watering is of the greatest importance and three applications a day may be needed. Keep the frames shaded with laths and put on glass if heavy rains threaten to do damage. It is for the advantage of the plants to be exposed to the night dews but when the days are very hot spraying will be required to keep them in good shape.

John Farrell says that the long thin freesia bulbs give better results than the thick heavy bulbs commonly sold, and doubtless he is right. The freesia is not a great money maker, but it is not a difficult flower to handle and florists like to have a steady supply coming on, so that several plantings will be required. The bulbs may be set one inch apart in the rows with four inches between the rows. They make quick growth and may be given full light as soon as the shoots appear. Before that it is well to keep them somewhat darkened. Do not forget that you are not likely to feed your freesias too much after they have become well started. From 55 to 60 degrees at night is the right temperature. Freesias wanted for Christmas should be potted up immediately.

There is likely to be a big demand for potted plants during the coming

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Reel of 500 ft.	"	18½ c.
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WHY THIS YEAR

BECAUSE the World needs all that you can produce

BECAUSE you must have all that the soil can produce in this time of high costs and great expense

So Feed Your Soil! Not Just Any Thing, but the Food that Your Particular Soil Needs.

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MAGIC BRAND FERTILIZERS are made up almost entirely of Vegetable and Animal matter with nothing added for weight or filler.

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holidays. Indeed many florists are looking for a record breaking sale this season. To be prepared for whatever may come you will need a generous supply of plants and now is the time to get them in. You will need plenty of poinsettias, Lorraine begonias, palms, cyclamens, primulas, Jerusalem cherries, ornamental peppers, araucarias, ferns and screw pines.

FLOWERS AT NEW ENGLAND FAIR

Some very attractive prizes are being offered for gladioli, dahlias and other flowers at the New England fair to be held in Worcester Oct. 1-4. They are as follows:

No. 1658—For the best exhibit of flowers to cover not more than 30 sq. ft. of table, \$10, \$7.50 and \$5.

No. 1659 Best group plants and flowers in pots or tubs, \$35, \$30 and \$20.

Nos. 1660 to 62 inc.—Mass displays of yellow, blue and any other single color autumn flowers respectively; each class, \$10, \$7, \$5 and \$3.

No. 1663—Collection of not over ten new, unnamed varieties of gladiolus, \$5, \$3 and \$2.

Nos. 1664 to 1668 inc.—Collections of gladiolus, different colors, each class \$3, \$2 and \$1.

Nos. 1669 to 1681 inc.—Collections (20 bottles) of Tuberous, Begonias,

Pinks, Petunias, Verbenas, Perennial Phlox, Nasturtiums, Marigold, Phlox Drummondii, large-flowered Dahlias (except Cactus), Cactus Dahlias, Pompon Dahlias, Geraniums and Asters; each class \$2, \$1.50 and \$1, except Dahlias and Asters (\$3, \$2 and \$1).

No. 1682—Twenty vases cut flowers, \$2, \$1.50 and \$1.

No. 1683—Best arranged vase of cut flowers, \$3, \$2 and \$1.

No. 1684—Basket with handle, \$3, \$2 and \$1.

No. 1685—Combination cut flowers and fruit, \$4, \$3 and \$2.

No. 1686—Vase of lilies, \$3, \$2, \$1.

No. 1687—Twenty vases of native flowers \$2, \$1.50 and \$1.

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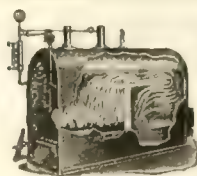
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THE FLORISTS BULLETIN

Florists of Great Britain are showing a great degree of activity especially since the close of the war, and there is every reason to believe that the industry in England is to be placed on a higher plane than ever before. The first number of the Florists' Bulletin just issued by the British Floral Federation is an indication of what to expect. This publication is full of interesting and timely material of the most practical character. For one thing, the Bulletin shows conclusively the great value of co-operation, especially when dealing with matters through government departments.

An article on horticultural sundries shows how important this branch of the business is and how closely the sundries trade has become allied to that of the growers. It is interesting to learn that a large proportion of the various goods included under the term of horticultural sundries came formerly from Germany and Austria, but that British made articles are now available, rendering it unnecessary to go abroad to meet the wants of the trade in this respect.

According to the Bulletin the war has shown the great importance of bulbs to all who are concerned in the production of flowers, especially early flowers for market. The successful efforts made by the federation in persuading the government to remove the embargo on certain bulbs from abroad is among the most useful work it has undertaken. The British Florists' Federation is an association of wholesalers and retailers in Great Britain which was founded in 1917 for the purpose of protecting and encouraging every section of the flower trade. This association promises to wield a tremendous influence in the future. Already it has increased from 172 members at the end of 1917 to nearly 300 at the beginning of 1919.

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It is direct heat dried and sterilized, weed seeds, grass seeds, fungus and disease germs destroyed in a direct heat rotary drying process that does not change or destroy any of the valuable elements in crude manure.

Air dried manures cannot be sterilized and usually carry excess moisture that actually makes them cost more per ton than Wizard Brand even at the same or a lower price.

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HELPING OUT THE CADDIE.

That versatile Philadelphian, Dr. Thos. A. Daly, has this to say:

"Commenting upon the story of a golfer in Rockland, Maine, who has a cat which chases the ball and sits by it until the player arrives, The Chicago Tribune considers this 'interesting chiefly as being the solitary reason for a cat's existence.' It should have a deeper interest for many another golfer. The cat as a golf-ball retriever—or pointer, perhaps, would be better—will never wholly prove its right to existence, notwithstanding this testimony from Rockland. The creature would go on strike in rainy weather, which some contend is the ideal golfing condition.

Even a light dew on the grass will keep the pussyfooter off it. But a dog! Ah! there's the pregnant idea! Why hasn't some one thought of training Fido to follow the elusive pill into the rough? An application of bone-dust or some such fragrant preparation would give the necessary scent to guide a smart dog. This would save to the country thousands of dollars hitherto represented by lost golf-balls, and the improvement in the public temper would be incalculable.

Our seed trade friends should hand this idea along to their greens committee when they come in for some more seeds of those famous golf club formulas. In the present scarcity of caddies it ought to help out some.



Neatness in the appearance will add to the Greenhouse Plant. This is one of the many features which has brought about the universal reputation of Advance Ventilating Equipment and Greenhouse Fittings. For Bracing, Shelving and Piping our Fittings cannot be beat. For satisfactory Ventilation, the Advance Ventilating Machine heads them all. Our catalog and latest price list will be of interest to you. Inquiries given special attention. Write today.

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Peony Dahlia Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order.
JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to **PEACOCK DAHLIA FARMS, Berlin, N. J.**

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Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2 1/4-inch pots at \$15 per 100—larger quantities on application. **J. H. FIESSER, 711-741 Hamilton Ave., North Bergen, N. J.**

TREE DISINFECTANTS.

At the present time bichloride of mercury dissolved in either wood alcohol or water, is the only disinfectant recommended and used by the Davey Tree Expert Co. for the treatment of tree wounds to kill any fungus which may be present. Bichloride of mercury is known also as mercuric chloride or as corrosive sublimate. It is manufactured by heating a mixture of mercuric sulfate and common salt.

Bichloride of mercury is procured from druggists in the form of small tablets. These tablets contain not only bichloride of mercury but also sodium chloride which is common salt. Ordinarily bichloride of mercury is only moderately soluble and the solution is slightly acid. However, by adding salt, as in the commercial tablets, the solubility is greatly increased and the acid is neutralized. Also the addition of salt lessens to a certain extent the activity of the compound.

Many times questions have been asked concerning the solubility of mercuric chloride not only in water but also in alcohol. At ordinary temperature, 100 parts of water will dissolve 7 to 8 parts of mercuric chloride. It is more soluble in alcohol. Since the formula for tree wound disinfecting calls for only one part in 1000 parts of water or alcohol mercuric

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HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laello-Cattleyas our specialty. One trial order solicited.

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FOR SALE—Greenhouse property, about two acres of land; opposite Cemetery. 7,000 ft. of glass; residence and store; doing fine business. No letters. **OSGOOD BROS., Everett, Mass.**

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WANTED—An Orchid Grower. One that is competent to take charge of the growing of Orchids. State experience, reference and salary expected. **W. J. & M. S. VESEY, Fort Wayne, Ind.**

chloride is easily soluble enough for a tree surgeon's purpose. Two large tablets in one quart of water or alcohol are amply sufficient.

It is a well known fact that bichloride of mercury is very poisonous. The poisoning property is due to the fact that it combines directly with a number of substances and particularly with albumin which forms a part of living matter.

Mercury either in the pure state or in solution such as the solution made by dissolving its bichloride in water has the peculiar property of dissolving most metals to form a substance known as an amalgam. Tin and copper are very readily dissolved while iron and platinum dissolve only slightly if at all. When an amalgam is formed the mercury is removed from its solution, and consequently its value as a disinfectant is destroyed. Therefore, it is necessary to always keep the solution in some glass or earthenware container. It is quite probable that by using a sprayer with a glass container little damage to the solution would result from it passing through a tin or galvanized iron nozzle.

THE DAVEY TREE EXPERT COMPANY.

C. M. SCHERER, Pathologist.

July 24, 1919.

Right Now more depends upon the Soil than ever before! You would not expect your Horse to work without food? Neither will your soil produce crops without fertilizer. Growers are using more fertilizers than ever before and to meet this demand we have organized

THE PROCTER FEED AND GUANO CO.

One of the best known men in the middle west and with a wide experience in all branches of



H. E. HUMISTON, President

Horticultural work. He and his associates are prepared to supply all your needs and solicit your trade.

Our products are for the Greenhouses, Commercial Growers, Landscape Gardeners, Private Gardeners.

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FOLEY GREENHOUSES



WHETHER you contemplate building a Curved Eave Iron Frame house, or one of a more plain design, you will find on investigation that our prices are right and our construction most modern.

THE FOLEY GREENHOUSE MFG. CO., 3275 W. 31st Street
CHICAGO

HORTICULTURE

Vol. XXX

AUGUST 30, 1919

No. 9

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.

THREE FINE ROSES RUSSELL, PREMIER and COLUMBIA



are splendid summer roses, and head the list in quantity and quality at present.

\$10.00, \$12.00, \$15.00,
\$20.00, \$25.00
per 100

New Crop of AMERICAN BEAUTIES at
\$20.00, \$25.00, \$30.00,
\$35.00 per 100

ASTERS are now at their best.
\$3.00, \$4.00, \$5.00, \$6.00
per 100

GLADIOLI are not so plentiful, but are still good.

\$3.00, \$4.00, \$5.00
per 100

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.
BUSINESS HOURS: 7 A. M. to 4 P. M., Saturdays 1 P. M.
Store Closes at Noon (Labor Day) September 1st.

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NEW YORK 117 W. 28th St. PHILADELPHIA 1608-1620 Ludlow St. BALTIMORE Franklin & St. Paul Sts.
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AT REDUCED PRICE TO CLOSE OUT

We have a small surplus of about 3,000 ROSALIND (The Improved Ophelia), strong plants out of 3½-inch pots, which we are offering at a specially low price to clean out, viz.:

\$25.00 per 100 — \$200 per 1,000

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We have a splendid lot of ferns for immediate shipment, in the following varieties and sizes:

Nephrolepis elegantissima, Elegantissima Compacta, Muscosa and Superbissima, 3½-inch pots.....	\$.35 each
Dwarf Boston, 3½-inch pots.....	.25 each
Elegantissima, Elegantissima compacta, Superbissima Dwarf Boston, and Scottii, 6-inch pots.....	.75 each
Muscoca and Smithii, 5-inch pots.....	.75 each
Smithii, 6-inch pots.....	1.00 each
Elegantissima compacta, 8-inch pots.....	2.00 each
Elegantissima, and Elegantissima compacta, 10-inch pots.....	4.00 each
Harrisii, 8-inch pots.....	2.00 each
Dwarf Boston, 8-inch pots.....	1.50 each

F. R. PIERSON, Tarrytown, N. Y.

FERNS

Boston and Scottii, -pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

5-inch \$4.80 per dozen — \$35.00 per 100

Alyssum Giant Double, Heliotrope, Lantanas, English Ivy, Swainsona, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts. For immediate shipment from 2-inch pots \$2.50 per 100, \$22.50 per 1,000.

Hardy English Ivy, Double Giant Alyssum, strong plants from 3-inch pots, \$3.50 per 100.

Coleus Brilliancy or Christman Gem, 2-inch, \$3.00 per 100.

Send for Catalogue

R. Vincent, Jr., & Sons Co.

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CYCLAMEN PLANTS

Farquhar's Gold Medal Strain

Strong Plants in 3½ in. pots, \$25.00 per 100
Trade Price on Application

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on Yearly Order

It would keep your name and your specialty before the whole trade.
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IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg. Boston, Mass.

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BOLGIANO'S 1919 SUMMER AND FALL CATALOG OF "BIG CROP" SEEDS

Special Prices for Florists and Market Gardeners.

Write for a copy at once—it will save you money.

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BALTIMORE, MARYLAND.

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Seeds, Bulbs, Plants Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

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Horticultural Sundries

166 W. 23rd St., NEW YORK

GARDEN SEED

BET, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

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Send us a list of your requirements in FRENCH and HOLLAND BULBS also PERENNIALS, for special prices.

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Through to 54 Park Place
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SPECIALIZE IN

SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

FREESIA PURITY

IMPROVED

Per 1000

¾ to ½ inch..... \$6.00
½ to ¾ inch..... 9.50

AMERICAN BULB CO.

172 W. Wabash Ave., CHICAGO, ILL.

Burpee's Seeds

PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds,
Improved styles in Implements
Catalogue upon application.

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BOSTON, MASS.

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mention *HORTICULTURE*

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium.

Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you

When writing to Advertisers kindly mention Horticulture

THE POT PLANT IN COMMERCE.

Of all the different branches of the horticultural industry none calls for more skill than the culture of pot plants for distribution to the public. Many excellent specimens of plants are, at all seasons of the year, to be seen at the Royal Horticultural Society's fortnightly meetings and at many provincial flower shows; but very often these plants are produced in pots of large size, whereas those grown for distribution have to be produced in small pots, hence the difficulty in culture. The chief reasons for the necessity of the small pot are, firstly, cost of transit; secondly, general appearance; thirdly, suitability for placing in the fancy pots generally used in private dwellings, says a writer in the *British Florists' Bulletin*.

The general appearance of a pot plant is a great point to be considered. In the flowering plants there are two sections—those used for decoration in groups and as individual specimens, and those used for flower gardening out of doors. For the first, a plant must be well balanced, of good color, not over-potted, fresh, and not too forward. In the second group the plants must be either in flower or on the point of flowering—the latter for choice especially in the case of *marguerites* and *pelargoniums*—so as to make a display when bedded out.

One other important necessity of the commercial pot plant is "traveling capability." Unless a plant is able to stand more or less rough handling it is useless for commerce. A very good test for a flowering plant is to give it about a dozen vigorous shakes, and then, if it is presentable, it may be of use to the market grower. There are many lovely plants that may be grown by the amateur for the conservatory—such as *gloxinias* and *begonias*—but which are of no use as finished plants, because it is almost impossible to pack them so as to ensure a presentable appearance on arrival at the desired destination.

The above remarks are now probably common knowledge to most of the readers of this article, but the following points may not have been brought home at all, or to retail florists in particular. Why should the public buy a pot plant? For the following reasons. It is better value for the money than cut flowers. For instance, an *erica*, *cyclamen* or *chrysanthemum* will last longer than a bunch of *chrysanthemums*, *carnations* or *roses*. Certainly, the plant cannot be used in the same way as cut flowers; but, after all, the final touch of comfort is in the home, whether the rooms are decorated with cut flowers

or pot plants. It is purely a matter of artistic arrangement of the furniture and the floral decorations in the most effective positions. Again, does everyone realize the value of a fern when flowers are very expensive and out of the reach of those possessing moderate incomes? A *pteris cretica major* or *asplenium biforme* will add grace and beauty to a room, and, with ordinary care, will remain in respectable condition for months.

The growing plant is of much more interest to the amateur gardener than a bunch of fading flowers. This should always be impressed on those who are buying a floral present for a friend who is a keen gardener. A *cyclamen* plant, purchased at Christmas, will continue to flower until April and give continuous interest to the owner. A *hydrangea* may be plunged in the soil in the garden after it has flowered, and, with slight protection during the winter months, it will flower quite well the following year. A *rambler rose* in a pot can also be treated in this way. *Fuchsias* and *pelargoniums*, *marguerites* and many other popular plants are of interest to the amateur for far longer than the actual time they are in bloom.

AMENDMENT NO. 3 TO REGULATIONS SUPPLEMENTARY TO QUARANTINE 37.

Under authority conferred by the Plant Quarantine Act of August 20, 1912, (37 Stat. 315), it is ordered that the rules and regulations supplemental to Notice of Quarantine No. 37 governing the importation of nursery stock and other plants and seeds into the United States, effective June 1, 1919, be, and the same are hereby amended effective on and after August 16, 1919, by the addition of a new regulation to be designated as Regulation 15, reading as follows:

Regulation 15. Permits for the Importation of Otherwise Prohibited Stock from Foreign Countries Contiguous to the United States.

When it is deemed by the Secretary of Agriculture that the importation from countries contiguous to the United States of any class or classes of nursery stock and other plants and seeds the entry of which is not otherwise provided for by these regulations will not be attended by serious risk to the agriculture, horticulture or floriculture of the United States, permits may be issued, on application, authorizing the entry of such nursery stock and other plants and seeds under such safeguards as may be prescribed in the permits: Provided, That importations under this regulation shall be

limited to specific classes of nursery stock and other plants and seeds which can be considered as peculiar to such contiguous countries, and not mere reproductions of imported stock from foreign countries, and which are not available in sufficient quantities in the United States: Provided further, That this shall not apply to nursery stock and other plants and seeds governed by special quarantines and other restrictive orders, other than Quarantine 37, now in force, nor to such as may hereafter be made the subject of special quarantines: Provided further, That in addition to the certificate required by Regulation 7, the invoice covering nursery stock and other plants and seeds offered for entry under this regulation must be accompanied by a certificate of a duly authorized official of the country of origin, stating that the nursery stock and other plants and seeds proposed to be exported to the United States have been produced or grown in the country from which they are proposed to be exported.

Done in the District of Columbia this 6th day of August, 1919. Witness my hand and the seal of the United States, Department of Agriculture.

D. F. HOUSTON,
(Seal) Secretary of Agriculture.

IRIS

Special Offer of Surplus Stock

While they last we will sell a selected list of Iris at a discount of 80% from retail catalogue prices.

The special list includes such choice varieties as Albert Victor, Celeste, Dalmarius, Doctor Bernice, Frederick, Iris King, Lohengrin, Mme. Chereau, Mrs. H. Darwin, Pallida Dalmatica, Princess Victoria Louise, Queen of May, Pheonix, Walhalla, Wyomissing and others

Not less than 20 of one variety at this price. No order accepted for less than 100.

A rare opportunity for dealers to improve their stock. Send for surplus list and order early.

Movilla Gardens
HAVERFORD, PENNA.

FERNS

	Per 100	Per 1000
BOSTONS 3 1/4 inch	\$6.00	\$50.00
ROOSEVELTS ... "	6.00	50.00
WHITMANI ... "	6.50	55.00
WHITMANI COM-		
PACTA "	6.50	55.00
VERONA "	6.50	55.00
TEDDY, JR. "	6.50	55.00

Stock all sold until June 1st.

Order either direct or through
S. S. Skidelsky & Co., Sole Agents
Philadelphia, Pa.

HENRY H. BARROWS, WHITMAN, MASS.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

POINSETTIAS

2 1/4 inch, \$10.00 per 100
\$90.00 per 1,000

EUPHORBIA JACQUINIAE FLORA

2 1/4 inch, \$16.00 per 100
No C. O. D. shipments.
Write for Prices.

L. J. REUTER CO.

PLANT BROKERS
329 Waverly Oaks Road, Waltham, Mass.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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ELMER D. SMITH & CO.

ADRIAN, MICH.

Snow Queen Cannas

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

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Robert Pyle, Pres. Antoine Wintner, Vice-Pres.
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CERTIFIED PUBLIC ACCOUNTANT

Simple methods of correct accounting especially adapted for florists' use.

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Telephone Main 54

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 418, DUNDEN, ILL.

Primula Malacoides Rohrerii

The best strain of Malacoides on the market. Years of patience have developed it to perfection. The beautiful shades of Rose Pink, Light Lavender and Snow White make it one of the most desirable and profitable plants to grow not only as single plants but for combination work it cannot be excelled.

	100	1000
Pink and Lavender mixed, 2 1/2 in.	\$6.00	\$55.00
Pure White, 2 1/2 in.	7.00	60.00
Malacoides Townsendi, Shell Pink only, 2 1/4 in.	6.00	55.00
PRIMULA OBCONICA—Roses Gigantea and Grandiflora, Apple Blossom and Kermesina. 2 1/4-in.	7.00	60.00
Eureka. New variety, very fine Chinensis x Obconica. Large flower, extra fine color. 2 1/2-in.	7.50	65.00
Chinensis. 2 1/4-in.	6.00	55.00

C. U. LIGGIT, Office 303 Bulletin Bldg. Philadelphia, Pa.

IBOLIUM The New Hybrid HARDY PRIVET (L. Iboia x Ovalifolium)

See Other Advertisements Soon to Appear. Introducers of Box-Barberry.

Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.

FREESIA BULBS

Purity (Improved)

	Per 1000
Size 1 1/2-3/4ths inch (large)	\$8.50
Size 3/4ths-1 inch (mammoth)	13.50

NOW READY

CALLA LILY BULBS

Size 1 1/2-2 inches, \$9.00 per 100

Cash with order, less 2 per cent.

McHUTCHISON & CO., The Import House
95 Chambers Street NEW YORK

ORCHIDS

We grow and sell nothing but ORCHIDS. If you are in the market for this class of plants we respectfully solicit your inquiries and orders. Special lists on application.

LAGER & HURRELL, Summit, N. J.

CHARLES E. PUTNAM.

Mr. Charles E. Putnam, Chief Engineer of the Boston Park and Recreation Department, died at his home, 105 Hutchins street, Roxbury, August 20. Mr. Putnam entered the service of the city thirty-six years ago in the work of improvement of the sewerage. He was appointed engineer of the Park Department in the year 1887, when construction was begun on Franklin Park. He had entire charge of this work as resident engineer, and since that time has had charge of all the undertakings of this department, including the extensive system of playgrounds. He was born at Jackson, Me., and was educated in that city, graduating from the Maine State College at Orono. He is survived by a wife and a son, Harold.

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.

IRVINGTON, N. J.

SEEDS AND BULBS Boddington's

128 Chambers St., N. Y. City

MICHELL'S FLOWER SEEDS

ASPARAGUS PLUMOSUS NANUS

We have just received from our grower a lot of fine, plump

LATHHOUSE GROWN SEED

1,000 Seed....\$2.00	10,000 Seed..\$18.50
5,000 Seed.... 9.75	25,000 Seed.. 43.75

CYCLAMEN SEED

MicHELL's Distinctive Giant Strain

	100	1000
Duke of Connaught, crimson	\$1.50	\$12.50
Excelsior, white with red base	1.50	12.50
Grandiflora Alba, white	1.50	12.50
Princess of Wales, pink	1.50	12.50
Salmon Queen, salmon pink	1.50	12.50
Mixed Colors	1.00	9.00

MIGNONETTE

COLOSSAL (MICHELL'S) A strain which cannot be surpassed for forcing a robust grower and produces immense flower spikes. Our seeds are saved from greenhouse grown specimens and give splendid results. Trade pkt., 40c.; \$5.00 per oz.

Also all other reasonable Seeds, Bulbs and Supplies

Send for New Wholesale Price List if you haven't a copy

MICHELL'S SEED HOUSE

518 Market St., Philadelphia

HORTICULTURE

Vol. XXX

AUGUST 30, 1919

No. 9

WHAT THE DETROIT CONVENTION ACCOMPLISHED

It was the biggest convention of the Society of American Florists since 1912, and one of the best conventions ever held. Everybody who attended came away confident that the latter statement is true. Much of the business was reported in *HORTICULTURE* last week. The election of officers resulted as follows:

President, A. L. Miller, Jamaica, N. Y.

Vice-president, F. C. W. Brown, Cleveland, O.

Secretary, John Young, New York.

Treasurer, J. J. Hess, Omaha, Neb.

The contest for president was one of the liveliest which has ever taken place at one of these conventions. At the same time it was remarkably friendly and free from rancor. The two candidates nominated were A. L. Miller and J. F. Sullivan of Detroit. Mr. Miller won by 47 votes, showing that the contest was very close. Some of the western delegates stood solidly for Mr. Miller, thus assuring his election. He has previously been a vice-president and is thoroughly alive to the needs of the organization and well equipped to be its leader.

The only other contest was for director, the candidates being Herman P. Knoble of Cleveland, Paul R. Kling-sporn of Chicago, and Irwin Bertermann of Indianapolis. Mr. Knoble was elected unanimously, but the vote for Mr. Kling-sporn and Mr. Bertermann was a tie. The decision was reached by the toss of a coin. Fortune favored the Chicago man, and he was declared elected.

As voted last year, Cleveland will be the convention city for 1920.

Among the important actions taken was one to raise the annual dues to \$5 and life membership to \$50.

All the amendments were passed. One of them does away with the old plan of selecting a convention city two years in advance. By the passage of this amendment the plan of holding convention gardens was also abandoned.

It was voted to raise the salary of the secretary, John Young, to \$5,000 a year, this being an increase of \$1,400.

Nobody seemed to doubt the assertion that Secretary Young's work made him well worth the additional amount.

The retiring president, Mr. Ammann, was presented with a beautiful silver service as a token of the esteem in which he is held by the association.

The Washington representative, Mr. William F. Gude, after reading his report which showed a year of unusual activity, was presented a gold cross, fashioned in the style of a war cross, and bearing on its face a rose set with a diamond. The presentation speech was made by Mr. Charles H. Grakelow of Philadelphia.



The New President, A. L. Miller

The publicity work was given an enthusiastic endorsement by the convention, and it was voted to appropriate \$5,000 to carry on the work.

One of the most interesting reports was that of William L. Gude, the Washington representative.

REPORT FROM WASHINGTON.

The past year has been an eventful one for your Washington representative, particularly the first three months of our fiscal year during which time the coal situation, which you are all so familiar with, created much concern, and much work for your Washington representative. The war is now over but the question of adequate help

still concerns us very much, and as for the coal situation while there is no embargo now, unless those who have not already gotten their coal for the coming winter, get it on the ground at once they may find themselves without coal to carry them through the coming winter. This is due to several causes, such as not sufficient miners to dig the coal, insufficient railroad facilities to distribute the coal and various other causes. However, I sincerely hope that the coal situation is not as black as it looks, because the last several seasons caused enough anxiety without having further coal troubles this year.

The Rose Garden which is conducted by the Department of Agriculture in co-operation with the American Rose Society now contains 700 varieties. During the year additions have been made to the extent of 3 varieties, 24 concerns were requested to contribute plants to the garden aggregating 161 varieties. Sixteen replies received and 3 firms sent plants totalling 15 and consisting of 3 varieties.

Fortunately at the time the Executive Committee of the Rose Society visited the garden this year, the weather was propitious and the roses were in better condition than at any previous meeting of the committee. The condition of the garden was creditable considering the difficulty of securing labor with the limited funds at the disposal of the Department.

The work of Dr. Van Fleet in breeding hardy garden types of roses has yielded exceedingly interesting results. There are now in the trial grounds between 3,000 and 4,000 seedlings and among the mature plants which have been selected out of the previous generations of seedlings, there are five or six remarkably promising new varieties which the committee of the Rose Society feels warrant introduction. These plants are not only interesting because of their inflorescence but because of their foliage and habit of growth.

While they have not yet been tested out in a wide geographical way, yet it is believed from the parentage which has contributed to these varieties that they will carry rose planting into regions not now well supplied

with hardy sorts which bloom profusely.

One of the remarkable plants is a hybrid form of *Rosa Rugosa*. The inflorescence in this hybrid consists of a large number of small perfect roses from $\frac{3}{4}$ of an inch to an inch in diameter borne in clusters of from 12 to 20 roses each and the great number of flowers borne by the plant give them the appearance of a large bouquet. Another of the new form carries a flower considerably brighter, somewhat larger, but with markings quite similar to that of the American Pillar. As this is a bush type of plant and is very floriferous, it promises much. These two sorts are outstanding in their inflorescence but others are very excellent for their class.

The Rose Garden which is jointly maintained by the Department of Agriculture and the American Rose Society is distinctively a test garden. The arrangements entered into between the Department of Agriculture and the Society were for the express purpose of determining the adaptability of varieties of roses to the soil and environmental conditions of Washington and for the purpose of affording the Department material to study roses in general, as well as for breeding purposes. As a result many have been disappointed in the appearance of the rose garden maintained at the Arlington Farm.

Those who visit the farm in the future should distinctly understand that the garden is a test garden for the purpose as above stated of determining the relative hardiness and adaptability of varieties and not a show garden. Acting upon this viewpoint the Executive Committee of the Rose Society at its annual meeting in June considered the plan of attempting to establish in the parks of Washington a show garden which should be based upon the results of the test work carried on at the Arlington Farm. It is believed that this plan of maintaining test plots and show gardens will yield the largest return to the interested rosarians of the country.

It is a significant fact that a considerable portion of the correspondence growing out of the publication of the Rose Annual has to do with the report of the committee on the behavior of the varieties of roses in the several field test gardens. Mr. McFarland clearly brought this out in his discussion of the matter and commented upon it as a significant indication of the character of information which appealed to rosarians the country over. The importance, therefore of the maintenance of the test gardens as the one

at Arlington is clearly indicated in the reaction by the public the information carried in the Rose Annual.

Experimental Work.

There will be submitted to the Chief of Bureau, who we hope will transmit it to the Secretary of Agriculture, an estimate and request for \$35,000, to undertake work under glass with the standard florists crops, including roses and carnations in particular, and for the purpose of erecting and maintaining a small bank of greenhouses to be devoted to investigational work, which may be of benefit to the florists of the country. In addition to this, we are also making for a small fund to be



William F. Gude

used in conducting efficiency test on the heating plants used by the florists throughout this country, in order that we may co-operate with them in an effort to make their fuel consumption more efficient and economical.

A preliminary study has been made of the results obtained by the florists and vegetable forcing industries and we are convinced that changes could be made in many plants which would affect important advice to the owners and operators of these plants, and it is this type of work which we feel, in addition to the actual investigational work in connection with florists' industries that could be undertaken by the Department with great profit to the industry.

ADVERTISING FLOWERS.

In part Major O'Keefe's address follows:

Flowers come under the head of articles requiring comparatively small outlay. We must therefore keep our advertising going. To popularize anything, it requires persistent and insistent reiteration, not repetition of

the same thought expressed in different ways but nationalizing a thought by continuous advertising.

We are popularizing very rapidly indeed our slogan "Say it with flowers." It is fast becoming one of our national sayings—a national institution and is today without question an asset which you gentlemen possess that is worth hundreds of thousands of dollars.

It is an asset which, unlike any other that I can think of has the practical ability of being divisible among a lot of business men scattered over our entire country. The example which it sets is one that, once cultivated, grows from one person to another in each community and from one community to another.

More Advertising Needed.

But—yes there is always a but—we have been too lenient with our ammunition. Our aim has been excellent and results good but our shots too small and far between to really get a good rich reward. Remember that while it is true that in our field, we are without competition, we have not, like the automobile people hundreds of others working on the sentiments of people to stir them to action and buy flowers.

That is up to us to do.

I do not however, want you to think that we have not, even in the short time we have been conducting our National Publicity Campaign attracted some outside help. We have. And it has been of much assistance.

We have brought about a use of flowers in pictures. You must have noticed among the magazines you read the tendency of artists to introduce flowers into their "Copy." Magazine Covers, advertising displays, illustrations for fiction—all this has helped.

President Wilson advised flowers for the proper celebration of our National Glorification of Peace Day. The Mayor of Baltimore in public proclamation, has taken up the thought and it rests with the florists in each community to do his part to keep this praiseworthy movement going.

But we will be expected to supply more and more material to this growing demand for more news about flowers—more ways to "Say it with flowers."

The Cost of a National Campaign.

We should go with a few words of greeting to every family in the United States every little while. Perhaps you may think this would require a fortune. What does it cost to advertise? It costs really less to advertise nationally than you gentlemen pay individually in your own community—that is per capita.

The cost of successful advertising on a national scale is not large. For instance, if you were to spend one cent per family per year for advertising, your expenditure for the year would be about \$220,000.00. The average total expenditure for advertising space in fifty-six leading magazines is less than one quarter of this sum. In other words, the average national advertiser buys less than \$50,000.00 worth of space per year or less than one-quarter of a cent per family in the United States.

A Good Advertisement.

What is a good advertisement? Should we make it brief and to the point? Most people will tell you so and most people believe they know all about how good advertisements should be written. Or should it tell all in one letter as the classified boys put it.

"People haven't time to read—make the ad short and snappy." is what nearly everyone will say. Mail order houses that receive direct orders in answer to their advertisements know what pays and what doesn't, what people read and what they don't read.

And yet strangely enough, all mail order advertisements are often very long. There was one successful advertisement that proved very profitable that had 2,200 words in it. People must therefore read long ads or those many worded ads would not pay.

On the other hand, Cream of Wheat advertisements often have no text at all, just the picture. With no other means of sales promotion, a great business has been created by this pretty picture advertising alone. Another great business uses pictures that are not pretty ones and quite subservient to the text and makes a tremendous success from that form of advertising.

It doesn't after all matter very much you see, just how you convey your ideas to the public. The public doesn't stop to worry over sentences. It stops, it looks, it listens and goes on its way. They've got your meaning no matter how you tell it to them but they judge you according to your own standard. Are you sincere, do you mean it? If you are, if you do, the public knows and acts as you want them to.

I believe that closer co-operation and a greater use should be made of our Promotion Bureau which acts as a clearing house for ideas in the florists' trade; where all new schemes for promoting the sale of flowers are collected for the benefit of all the members of the association. In a number

of cities throughout the country there are well organized movements for encouraging the use of flowers as window decorations at homes and even in office buildings and factories. In others there exists co-operative schemes for the use of flowers as window decoration by shoe stores and department stores. I cite these as suggestions which might be fully developed through the efforts of the association. As I have already said, I believe the coming year will be one of exceptional prosperity. Prophets of evil we will have with us. You will continue to hear a grumbler here and there predict the early tolling of the funeral knell for business and a cheerful idiot recognizing the future only as a tinkle of bells.

WARM QUARANTINE DISCUSSION.

One of the most interesting features of the convention was the discussion which followed the address of Dr. Marlatt of the Federal Horticultural Board in which he defended Quarantine No. 37. Dr. Marlatt took full responsibility for this measure and said that he believed the people of the country were not so strongly opposed to it as had been represented. He had found no opposition in California, he said, or in the Middle West. He thought that when growers found they could make greater profits as a result of the quarantine they would be pleased that it had been imposed.

Prof. Dorner of Urbana, Ill., then arose and speaking for himself declared that the quarantine was a severe blow to the gardening interests of this country and that the danger from pests has been greatly exaggerated by Dr. Marlatt. He felt that the florists of the country had been greatly misled. Prof. Dorner was most emphatic in his remarks.

Mr. Washburn of California formerly an Eastern rose grower, but now growing palms on the Pacific coast, approved the quarantine, said he was glad that Belgium palms had been excluded and that he had received the best seed he had ever seen from American sources.

Mr. Farquhar of Boston was the next speaker and attacked the quarantine vigorously, saying there was no reason for excluding a great number of small bulbs and admitting those like the hyacinths which are most likely to transmit disease or pests. He declared that while the florists would suffer greatly, the blow would be felt most keenly by the amateur gardeners who were now making great progress since the beginning of the Garden Club movement. Mr. Farquhar declared that

he did not appear to forward Dreer propaganda but felt one of the most unfair things that Dr. Marlatt's board had done was its attack on the Dreer house. This statement was warmly applauded.

Mr. E. G. Hill then arose and said that he was surprised at the stand taken by Mr. Farquhar and Mr. Dorner. He believed that it would be far better to have the Eastern interests suffer and perhaps much of the stock wiped out than that any of the foreign pests should gain admittance to the fields of the West.

AMERICAN ROSE SOCIETY.

In the absence of President Pyle, Mr. E. G. Hill acted as chairman of the meeting of the American Rose Society, at Detroit, Mich., with Mr. Benjamin Hammond acting secretary. A number of communications were read bearing upon the advancement of the society. Mr. Mulford explained the attitude of the Department of Agriculture in relation to the origination and distribution of the new roses upon which Dr. Van Fleet is working and suggested that the American Rose Society assist in some way in getting into the hands of a few careful growers this stuff for further distribution, with the idea that it should continue to be known as the product of the Department of Agriculture, and further with the idea of working out some scheme whereby these roses may be distributed in a fair manner to the public and to the trade in general. It is intended to avoid an excessive price being put on the public and also to avoid any criticism that some favored one or few could get on the inside and get unfair advantage. The entire matter after general discussion was referred to the executive committee for further consideration that they might develop proper machinery for a just and equitable distribution of these good products.

NEW BEDFORD SHOW.

The first annual gladiolus show at New Bedford, Mass., last week was so well attended that it was kept open an extra day. Besides the fine display of gladioli, there were many seedling dahlias.

Joseph A. Nolet was the largest exhibitor of seedling dahlias. Among the blossoms he showed were some of the dahlias of Thomas J. Murphy of Peabody and Miss Nellie Jilson of Lakewood, R. I. A. J. Fish, Thomas Hughes, George Gibbs and George Reynolds also had dahlias at the show. Mr. Nolet was given a special award of merit.

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Well
done

The work of the Detroit Convention was well done. The new officers are men of standing to the trade, of enterprise and activity in business, of kindly and friendly habit in their intercourse with their fellow men. They should carry the society through another year of progress and increasing prosperity. There were some sharp contests before the new officers were elected, but the meetings were notable for their freedom from hard feeling and the apparent desire of everybody to work for the best good of the organization. In fact, the whole atmosphere of the convention was in itself an indication of the fact that a new era and one of great promise is being entered upon. As expected, all the amendments were adopted. They will make for the society's good. It is true that some members lament the passing of the convention gardens. These gardens were excellent in theory, but failed to work out well in practice, all things considered, although several good gardens have been made. Altogether the S. A. F. is to be congratulated on the success of the convention, the Detroit florists are to be warmly thanked for their countless courtesies and a vote of appreciation is due the clerk of the weather.

Protection for
nurserymen

Inasmuch as a number of articles have appeared in *HORTICULTURE* relating to the protection of nurserymen who are propagating new varieties of plants, it is interesting to notice how the matter is being treated across the water. The subject is not nearly as new over there as it seems to be here. Indeed it has come up for perennial discussion for many years. Now, however, the Council of the Chamber of Commerce in England has decided to appoint a representative committee consisting of two members from each section of the Chamber to deal with the question. This committee is to consider the whole

situation with a view to arriving at some scheme for securing to the raiser the remuneration to which his toil and attention equitably entitle him. Evidently the matter is considered of special importance just now, and the *Horticultural Trade Journal* in which the report is printed urges that anything which can be set forth in support of this movement should be sent in writing to the secretary of the Chamber. Nurserymen and others in America will be greatly interested to see what the results of the agitation prove to be.

New
publicity
plan

In his report at the Detroit convention, George Asmus, chairman of the Publicity Finance Committee, said that a plan for billboard advertising was well under way. Before the convention was over he was able to report in detail to his committee and to receive the endorsement of his plan. He said that he had made arrangements for the manufacture of sheet metal street signs, 7 x 20 feet, to be shipped in sections. These sign boards will contain simply the slogan: "Say It with Flowers." The signs will be in colors and visible for a long distance. The price will be \$50.00, f. o. b., and the signs can be set up readily by any handy man.

Before the convention had closed Mr. Asmus was able to say that the florists of Cook county, Illinois, acting as individuals and not as an organization, had already placed orders for a hundred of these signs. It is believed that there will be a brisk sale all through the country, and that the phrase which is now becoming a household word the country over will be made even more familiar in this way, for it will be photographed on the minds of the motoring public wherever motors go.

Commissions

The question of secret commissions, rebates and the same things under other names constitutes a somewhat delicate subject in this country, as applied to gardeners, seed houses and nurserymen. If we are not mistaken the National Gardeners' Association and other organizations have passed strong resolutions in regard to the matter, but it is difficult to find any one who will say that the practice does not still prevail. Nevertheless, there seems to be a strong undercurrent of feeling, especially among the dealers, and some sort of pronouncement is likely to be heard one of these days.

Across the water an organization known as the Bribery and Secret Commissions Prevention League has been formed. Indeed, it has been in existence for some time, but has been largely quiescent during the war. Lord Lambourn has just been made president to succeed the late Sir Edward Frye, and in an open letter he says: "I am convinced that the organization is a live one and very much needed at the present time. That I am not alone in this opinion is shown by the fact that nearly 350 new members have joined since the first of last year—of late at the rate of almost one a day. But it must be obvious that to exert a widespread influence in preventing bribery which is so prevalent, the membership of the league should be much larger than it is. On the ground of quality there is nothing to complain of. For in educating public opinion it is the big battalions that count. I should like to appeal, therefore, with your kind permission, to all who prize clean trading and are jealous of our national reputation for honesty, never more needed than now, to support the League."

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

Trade Prices on Application

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BOSTON, MASS.

NURSERY STOCK IMPORTATIONS FROM CONTIGUOUS COUNTRIES.

Washington, D. C.—Importations of nursery stock, other plants and seeds from contiguous countries, the entry of which will not be attended by serious risk to the agriculture, horticulture, and floriculture of the United States, are permitted by an amendment to the Plant Quarantine Act, according to an announcement just made by the United States Department of Agriculture. The amendment known as "No. 3 to Regulations Supplemental to Quarantine No. 37," is to be effective August 16, 1919. Under it the Secretary of Agriculture may issue permits, when applications are made, authorizing the entry into the United States of such nursery stock, other plants and seeds when they are free from disease and insect pests and it is known that their entry will not be attended by serious risk.

Importations under this new regulation are limited to specific classes of nursery stock, plants and seeds which can be considered as peculiar to such contiguous countries, and are not mere reproductions of imported stock from foreign countries, and which are not available in sufficient quantities in the United States. It does not apply to plants and seeds governed by special quarantines and other restrictive orders other than Quarantine No. 37, which is now in force. In addition to the certificate as to freedom of pests required in connection with all plant importations the invoice covering the material offered for entry under this regulation must be accompanied by a certificate of a duly authorized official of the country of origin, stating that the material has been produced or grown in the country from which it is proposed to be exported.

The above is the official interpretation of "Amendment No. 3 to Regula-

tions Supplemental to Quarantine No. 37," which became effective on August 16 last. It is interesting merely as showing the "backing and filling" of the Federal Horticultural Board. To the garden lovers of this country it is not worth the paper it is printed upon. The only contiguous countries are Canada and Mexico and the native horticultural products of those countries have little value here. The official copy of the Amendment which is before me reads . . . "contiguous to the United States." One might ask ironically of this slip in spelling whether this amendment is a sop intended to unite the states of North America? It cannot be offensive to our Canadian friends though its worth is dubious but it is open to doubt if it will have a soothing or indeed, any effect upon the banditti of Mexico or even upon President Carranza of that much troubled country.

This is the third amendment so-called to Quarantine No. 37 and for all practical purposes of like value with the others. How long have those interested in the upbuilding of horticulture in this country to wait before the F. H. B. comes down to the realm of practical legislation and drafts something that will be of real service and benefit to the country? I repeat the question—how long? Will not the F. H. B. read the writing on the wall?
E. H. WILSON.

NO QUARANTINE IN CANADA.

There has been a somewhat persistent report to the effect that quarantine measures similar to those which have been imposed upon the United States by the Federal Horticultural Board were being considered in Canada. The following letter dispenses of that rumor:

Dear Sir: I beg to acknowledge re-

ceipt of your letter of the 15th instant addressed to Dr. C. Gordon Hewitt, in reference to a report that you have received to the effect that Canada is about to place restrictions on the importation of nursery stock similar to those at present in effect in the United States. I may say that there is no foundation for this report.

Yours very truly,

LEONARD S. McLAIN.

Chief of the Division

of Plant Inspection.

STARTING POINSETTIAS.

Poinsettias can be started at once. It often happens that cuttings bleed, but this can be prevented or stopped in part at least by covering the bleeding part with fine charcoal. The cuttings should be kept in the shade for two weeks or until well rooted before they are potted up. If the old plants that have been cut back are kept on the dry side for ten days or more and then repotted they will give a good account of themselves. They need a rather sandy soil and a little well decayed cow manure helps them. One point to avoid at first is overwatering, but when well started they will stand more water and like a good feeding of liquid manure. Try Aphine if the mealy bug shows up on the poinsettias.

ORDERING PLANTS

If you wait too long you are likely to have difficulty in getting plants you want. Get in your order for geraniums as quickly as possible, for there is pretty certain to be an increase in price a little later in the season. If you want sweet peas for Christmas sow the seed at once, preferably in three inch pots, four seeds to a pot. Bone meal is a good fertilizer, but should be low enough in the pots so that the roots will reach it only after they have begun to grow a little.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

What's in a name? Sometimes very much, as in this clipping which I have just received from George Watson of Philadelphia:

"Naming a plant or flower after a celebrity is a delicate compliment, and one that no doubt adds something to the market value, says a writer in the 'Daily Chronicle.' But there are exceptions. The beautiful variety of the lobelia, for instance, known as 'Emperor William,' would perhaps hold up its Imperial head a little more proudly just now if it had had a more fortunate christening.

Stray thoughts on these lines may have been flickering in the mind of a vendor in a London market-place the other day as a likely looking buyer, while examining a box of the old favorite, asked what variety it was. Without deranging the muscle of an eyelid the coster (and she was a 'lydy,' too) replied: 'Douglas 'Aig! Four-and-a tanner a box.'"

In the Philadelphia market, and no doubt elsewhere, that favorite white rose Kaizerin Augusta went a-begging until some bright salesman rechristened it Victory. Then it went back to its old place and sold like winking.

I have to admit that I am somewhat disappointed in the Erskine Park raspberry, which I set out this spring. The plants have thrived well enough but they have almost a running habit like the dewberry. I judge that the only way to grow these raspberries will be to stake them, although of course I am writing so far from only a limited experience. The St. Regis raspberries began bearing two weeks ahead of any other kind and have kept up until now. Undoubtedly there will be another good crop in the fall. This is really a spring and fall berry rather than an everbearing kind, as advertised. It is an excellent berry for the home garden because of its long season, but would not make, it seems to me, a very good commercial variety. In size the fruit is not to be compared with that of the new Minnesota No. 4, several plants of which were sent me by the Minnesota Horticultural Society and which have multiplied so that I have a nice little plantation. The fruit is very large and of excellent quality, although not very early to ripen. In my garden this berry has proved far superior to the

Erskins Park, which I rather regret as the latter is a Massachusetts product, a seedling from the old reliable Cuthbert and discovered on the Westinghouse estate at Lee, Mass., by Mr. Edward Norman. Possibly after a longer trial I shall be able to report more favorably. In any event, I hope so, although I don't like the prospect of putting up stakes for all these plants.

I am much interested to learn that the Garden Club of America will probably hold its next annual meeting in Boston. It will be a pleasant task for the garden lovers of New England to entertain the visitors from the other parts of the country, the coming of whom is due, I understand, to the invitation of Mrs. Crowningshield and Mrs. Crosby of the North Shore Garden Club, the invitation being extended at the meeting held this year at Lake Forest. It is probable that two or three hundred of the most observant amateurs in the country will come to Boston, and I am told that one particular reason for their acceptance of the invitation is their desire to see the Arnold Arboretum. It seems likely that the date set will be early enough in the season so that the visitors will have an opportunity to see the lilacs or the Japanese crabapples, and it is to be hoped that nature will be especially kind by producing an extra fine display.

AMERICAN GLADIOLUS SOCIETY.

At the meeting in Detroit last week, officers elected for the next two year period were as follows: President, H. E. Meader, Dover, N. H.; vice-president, C. R. Hinkle, St. Joseph, Mich.; secretary, A. C. Beal, Ithaca, N. Y.; treasurer, Madison Cooper, Calcium, N. Y.; executive committee, Joe Coleman, Ravenna, O.; Lee R. Bonnewitz, Van Wert, O.; I. S. Hendrickson, Flowerfield, N. Y. The society voted to hold the next meeting and exhibition in Cleveland during the week of the S. A. F. convention, provided satisfactory arrangements can be made as to a meeting place and exhibition hall.

The awards at the Detroit exhibition were as follows:

Collection, 10 varieties, 3 spikes each—1st, C. Zeestraten, Bemus Point, N. Y.; 2d, United Bulb Co., Mt. Clemens, Mich.
12 varieties, 3 spikes each—1st, Joe Coleman, Ravenna, O.; 2d, C. Zeestraten.
12 vases, 12 varieties, 1 spike each—1st, Joe Coleman; 2d, H. E. Meader, Dover, N. H.
5 vases, 5 varieties, 6 spikes each—Madison Cooper, Calcium, N. Y.

6 spikes white—1st, Madison Cooper; 2d, United Bulb Co.

6 spikes yellow—1st, Madison Cooper; 2d, E. C. Ludwig Floral Co., Pittsburgh, Pa.

6 spikes pink or blush—1st, Madison Cooper; 2d, J. F. Munsell, Ashtabula, O.

6 spikes crimson or red—1st, Madison Cooper; 2d, H. E. Meader.

6 spikes blue, purple or lavender—1st, Joe Coleman; 2d, H. E. Meader.

6 spikes ruffled—1st, Madison Cooper.

Best seedling gladiolus never before exhibited—1st, Joe Coleman; 2d, H. E. Meader. Honorable mention to J. F. Munsell for Seedling White No. 1.

12 spikes Myrtle—1st, Madison Cooper.

3 spikes Lily White—1st, Madison Cooper. Basket or hamper, 50 spikes, different varieties—B. Hammond Tracy, Wenham, Mass.

Burpee Cup for largest display, number of varieties, quality and staging considered—National Bulb Farm, Inc., Benton Harbor, Mich.

Vase 25 spikes primulinus hybrids—C. Zeestraten.

Vase or basket 25 or 50 primulinus hybrids—C. Zeestraten.

25 spikes Mrs. Watt—H. E. Meader.

6 spikes Prince of Wales—1st, Dr. R. W. Schnarr, Kitchener, Ontario, Can.; 2d, Madison Cooper.

Spike Anna Eberius—1st, Madison Cooper; 2d, H. E. Meader.

3 varieties blue gladioli, 3 spikes each—1st, C. Zeestraten; 2d, H. E. Meader; 3d, United Bulb Co.; 4th Madison Cooper.

Centerpiece not more than 15 spikes grown and arranged by exhibitor—1st, C. Zeestraten; 2d, H. E. Meader.

Display of Austin originations—Madison Cooper.

Collection of Kunderd varieties—Madison Cooper, gold medal.

6 spikes Purple Glory—1st, Madison Cooper; 2d, H. E. Meader.

6 spikes Myrtle—1st, Madison Cooper; 2d, H. E. Meader.

6 spikes Mrs. Frank Pendleton, 6 spikes Summer Beauty, 6 spikes Orange Glory, 6 spikes White, 6 spikes Yellow, 6 spikes Pink or Blush, 6 spikes Crimson or Red, 6 spikes Blue, Purple or Lavender, 6 spikes, any other color, 3 spikes Yellow, 3 spikes Pink or Blush, 3 spikes Crimson or Red, 3 spikes Blue, Purple or Lavender, 3 spikes any other color, collection of 10 named varieties, 3 spikes each—1st, Madison Cooper.

Best exhibit of at least 15 varieties, 3 spikes each—Madison Cooper, silver medal.

10 spikes Pink, 10 spikes Red or Crimson, 10 spikes Yellow, 10 spikes White, 10 spikes Blue, Purple or Lavender, 10 spikes any other color, 10 spikes Primulinus hybrids, orange, 10 spikes Primulinus hybrids, yellow, 10 spikes Primulinus hybrids, any other color—1st Madison Cooper.

Best spikes Myrtle—Madison Cooper.

Largest and best display for Michell medals—1st, Madison Cooper—2d, St. Thomas Horticultural Society, St. Thomas, Ont.

6 spikes Mrs. Dr. Norton, 12 spikes Mary Fennell, 6 vases, 6 varieties, 1 spike each, predominating color blue, purple, lavender or mauve, vase 25 spikes primulinus hybrids, 10 named varieties, 1 spike each, 6 spikes red variety, 6 spikes white variety, 6 spikes yellow, 6 spikes Crimson Glow, 6 vases 6 varieties, 1 spike each, predominating color red or pink, largest display of primulinus hybrids—1st, Madison Cooper.
3 spikes Myrtle, Purple Glory, Mrs. Pendleton, Alice Tiplady, Lily White, Rose Glory—1st, Madison Cooper.

Special Awards.

Honorable mention to United Bulb Co. for variety Wisconsin; H. E. Meader, for Lily White; J. F. Munsell, for seedling White No. 1; A. H. Austin, Wayland, O., for variety Evelyn Kirtland; Jelle Roos, Milton, Mass., for varieties Mrs. Dr. Norton and Fennell; The Grullemans Co., Avon Lake, O., for splendid achievement in hybridizing primulinus; Vaughan's Seed Store, Chicago, for excellent display; Pittsburgh Cut Flower Co., Pittsburgh, Pa., for trade display.

The judges in the open classes were Dr. Frank E. Bennett, St. Thomas, Ontario, Can.; Mrs. A. H. Austin, Wayland, O., and Jelle Roos, Milton, Mass.

The judges in the non-commercial classes were J. F. Munsell, Ashtabula, O.; Prof. A. C. Hottes, Columbus, O.; and C. Zeestraten, Bemus Point, N. Y.

A. C. BEAL, Sec.

THE GARDENER'S SECTION

SALVIAS FOR THE GARDEN.

Very few groups of plants are so little known and appreciated for their use in the garden as the *Salvias*, writes S. R. Candler, in the *Journal of the International Garden Club*. These belong to that well known family of plants, *Labiatae*, from which we are supplied with so many gems of the garden.

The four *Salvias* I wish to speak of as of special value for their utility and easiness of culture are: *Salvia farinacea*, *S. uliginosa*, *S. azurea grandiflora* and *S. patens*. All are herbaceous perennials but shall be treated as annuals with the exception of *Salvia azurea grandiflora*, which although a native of Mexico, is perfectly hardy.

Salvia farinacea. The seeds should be sown in a hot bed or in a warm greenhouse about the end of March, and as soon as the seedlings are large enough to handle should be pricked off into boxes about three inches apart, these seedlings should be kept growing in a warm temperature and gradually hardened off till they are

ready to be planted in the open ground in May; when they should be planted in a good soil with a sunny location, about eighteen inches each way apart. In July they will be one mass of lavender blue flowers.

The great beauty of this plant is in the flowers, as the corolla and the calyx are of the same color and when the former drops the calyx remains and gives the appearance of a sprig of English Lavender (but lacks its perfume). *Salvia farinacea* is of importance as a cut flower, it lasts a long time when cut and placed in water; but it should always be planted for effect in bold masses.

Salvia uliginosa. The seeds and seedlings should have the same treatment as *S. Farinacea*, but with this difference; the plants should always be allowed two feet each way when planting, and should have a well manured soil, they also like a dry location.

This *Salvia* is the last of the *Salvias* to come into flower but it continues to flower till late fall. It will grow to

a height of 4 to 5 feet and, therefore, should not be planted in front of the border but at the back. It is a most profuse bloomer and the flower tresses are from eight to ten inches in length and are of a pretty cornflower blue with a little white in the throat, a most distinct color in *Salvias*. No *Salvia* is so useful for massed effect in the border, and while it is a good cut flower it does not equal *S. farinacea* in that respect.

Salvia azurea grandiflora. In the seedling stage this plant requires the same treatment as the above mentioned, but once you have a good supply it will remain with you as the roots are perfectly hardy and the plants will increase in strength from year to year. The habit of this plant is not so free as the two already mentioned, the stems are more woody and stiffer and the flowers are not borne with such profusion, but still it is a very worthy subject for the garden and vase as a single stem of flowers form quite a show of blooms. It is its color that appeals, it has a blue that is lighter



Salvia Virgata Nemorosa

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At your service to deliver Flowers or Designs on Order by Telegraph or otherwise. Prompt Reliable Service.

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**Max Schling
Flowers**

Schling Service
Nothing Better

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"Says It With Flowers"

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Randall's Flower Shop

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Member Florists' Telegraph Delivery

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ANDERSON service means fresh, sturdy stock and prompt deliveries in BUFFALO, LOCKPORT, NIAGARA FALLS and WESTERN NEW YORK.

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OMAHA, NEB.

KNOBLE BROTHERS

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We are well equipped to handle your orders.

1836 W. 25th Street CLEVELAND, O.

THE SMITH & FETTERS CO.

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CLEVELAND, OHIO

Flowers of Every Kind in Season

PHILADELPHIA

CHAS. H. GRAKELOW F.T.D.

Everything in Flowers

Broad Street at Cumberland

The Park Floral Co.

B. E. GILLIS, President.

E. P. NEIMAN, Secretary.

Member Florists' Telegraph Delivery

DENVER, COLORADO

than any other blue in the garden with the exception of a few Delphiniums. It should be planted not for massed effect, but rather to increase the color scheme of the border and therefore, six to twelve plants, planted in clumps every little distance in the border has a very pleasing effect.

Salvia patens. This plant requires a little more heat in the seedling stage and when possible should be worked into pots before planting out, so as to form strong individual plants, as the habit of this plant is to send shoots or stems from the crown. It does not branch like *S. uliginosa* and *S. farinacea*, so, therefore, the stronger the crowns the more flowers will be produced. The plant produces herbaceous roots and where possible it should be taken up in the fall, potted and kept in a cool greenhouse all winter; in this way other strong plants are formed and the true character comes out the following season. It should be used more as a bedding plant than as a cut flower plant as the flowers do not stay long when cut, but when left on the flower stems continue to grow in length and as soon as one flower falls another is formed, thus keeping up a continuous mass of blooms the major part of the summer months. To be effective it must be massed and if used with *Hunnemannia fumariaefolia* it makes a good combination.

Mr. Candler has by no means exhausted the subject of salvias. There are several others which are well worth the attention of growers. Mr. Richard Rothe considers *Salvia virgata nemorosa* one of the best of the perennial sages. This plant has beautiful dark blue spikes which are produced during the latter part of June and through the month of July. The accompanying illustration shows this salvia in bloom.

Then there are the different forms of the native species, *Salvia Greggii*, which are of medium height and with a bushy habit of growth.

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NURSERYMEN'S CREDIT AND COL- LECTION BUREAU.

Service Has Now Been Resumed—
Committee Appointments.

The Credit and Collection Bureau formerly conducted by our counsel, Curtis Nye Smith, was temporarily suspended after his release as counsel, though he courteously conducted it to accomodate us for over a month after the expiration of his contract.

The Executive Committee in Chicago directed President Moon to see what arrangements could be made for the continuance of this service that members had enjoyed. With the assistance of Mr. Watson arrangements have just been made with the United States Fidelity and Guaranty Company of Baltimore through their New York office. Any member of the American Association of Nurserymen is now entitled to subscribe to the service of this company through Secretary Sizemore's office. The fees for collections will be the same as have been previously charged under the arrangement with Mr. Smith. The credit reporting feature which the new arrangement offers ought to be of great benefit to nurserymen for they can readily secure in advance credit reports of any customer about whom they are in doubt. The service will also include collection letters, proper forms of draft and list of attorneys who are secured by bond of the United States Fidelity and Guaranty Company.

The United States Fidelity and Guaranty Company protects the Association and any members subscribing to the service by a bond of \$10,000 with a limit of \$2,500 on any one at-

torney. This bond will for the present be deposited with President Moon. The detailed announcement will be mailed to members of the Association within a few days. Under the new plan each member is directly benefited financially for he can here subscribe through his association to a service which would, if purchased separately, cost him from \$15 to \$20 per annum and while through the Association he can secure this for \$5.00 per annum which covers the cost of the list of guaranteed attorneys and the quarterly supplement thereto.

Nurserymen having claims with Curtis Nye Smith will withdraw them and be given an opportunity to subscribe to this new service to further prosecute their claims.

Vice-President Lloyd Stark paid a visit upon President Moon on Tuesday, August 19, at which time a number of matters important to the Association were discussed and the committee appointments considered.

Committee appointments already decided upon include C. G. Perkins, 2nd Vice-President Jackson & Perkins Co., Newark, New York as chairman of the Legislative Committee. William Pitkin of Chase Brothers Company, Rochester who long served efficiently as chairman of this committee has consented to be a member of it that the committee may have the benefit of his experience. The rest of this Committee it is Mr. Moon's idea to select from the Legislative Committee of the state and sectional association. He thereby expects to link up these associations with the National Association and to provide a direct means of communicating Legislation arising in any state with the National Chairman.

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INVITATION TO SEEDSMEN.

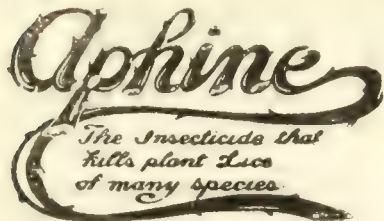
The Jerome B. Rice Co., will hold open house, September 2nd to 5th, at their big seed growing farms, and Trial Grounds at Grass Valley, Mich., and have extended an invitation to all seedsmen to come along and bring their note books with them. The reception committee are Howard M. Earl and Charles P. Guelf, and everybody knows how genial these gentlemen are, and how ardently they will endeavor to make the visit a pleasant and profitable one for everybody. The company announces: "Besides an acreage in excess of 1,200 in seed crops now maturing on the farms, we have in the Trial Grounds now, and which will be at their best at that time, 118 selections of Cucumbers, 190 of Tomatoes, 334 Garden Beans, 188 Sweet Corn, 114 Musk Melons, 62 Water Melons, 90 Cabbages, 51 Squashes and Pumpkins, 18 Peppers, also a very complete Radish and Root Crop trial."

The following directions are given as to the best way of reaching the grounds: Grass Lake, Michigan, is a small village of 800 inhabitants, lo-

cated on the main line of the Michigan Central railroad between Detroit and Chicago and is 219 miles east of Chicago, 65 miles west of Detroit and 10 miles east of Jackson, Mich.

Friends coming from the west via Chicago have the choice of two sleepers on the Michigan Central, one leaving Chicago at 12.05 a. m. and arriving at Grass Lake village at 6.20 a. m. and another at 2.15 a. m., arriving at 9.05 a. m. Coming from the east via Buffalo, take the Detroit boat leaving Buffalo at 6 p. m. which will make quick connection at Detroit with the Michigan Central leaving at 8.15 a. m. going through to Jackson, arriving there at 10 a. m. Coming from the east by rail make your objective point Jackson, as no fast westbound trains stop at Grass Lake. Jackson is connected with Grass Lake by frequent service on two trolley lines. Coming via Toledo, a Lake Shore train leaves Toledo at 7.40 a. m. and reaches Jackson at 10 o'clock.

On arriving at Grass Lake village, phone the Seed Farms, two miles out, and we will drive in and get you."



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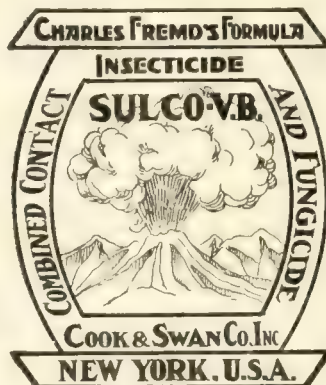
½ Pint, 80c.; Pint, 50c.; Quart, 90c.; ½ Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.90; 10 Gallon Can, \$20.00.
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No.	Diam.	Ea.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
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60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

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182 N. Wabash Ave. - Chicago

NEWS AND COMMENT

PHILADELPHIA.

The Kelly Street Business Men's Association were the guests of the famous civil engineer and railroad builder, Capt. Frank H. Clement, at Port-au-Peck, near Long Beach, N. J., on August 23 and 24. This organization, according to the bronze tablet at Kelly street, consists of: "Members of the Judiciary, Senators and Representatives of the United States, State Legislators, Officers of the Army and Navy and of the National Guard, Engineers, Scientists, Lawyers, Newspapermen, Financiers, Merchants, Manufacturers, Thespians and Bonifaces." The horticultural trade was represented in this remarkable aggregation by John Burton, Paul Huebner and George C. Watson. A clam bake under the trees on the lawn was a feature of Saturday's proceedings.

Howard M. Earl started on the 21st on a business trip among the seed trade down Detroit way. John H. Earl is in the P. R. R. civil engineering corps, at present operating in the vicinity of Baltimore. Douglas Earl is back on his old job at the Dreer seed store having started in again on the 18th inst. after a brief vacation since his return from the front in France.

MR. SHERRY'S NEW POSITION.

W. J. Sherry, of Dreer's, leaves that firm on Aug. 29 and connects with the Peacock Dahlia Farms at Williamstown Junction, N. J., as office and sales manager. Prior to his connection with the H. A. Dreer Corporation Mr. Sherry was for 25 years manager of the mail order, flower seed and bulb

departments for Johnson & Stokes, a well known Philadelphia seed firm. Mr. Sherry will leave for Boston on Aug. 30th and join his family and enter upon his new duties at the Peacock Dahlia Farms on September 8th.

NEW ENGLAND.

Burt, the Greenfield, Mass., florist, purchased of C. A. Bryant of Templeton four large greenhouses which will be removed to West Deerfield and erected at once. Two of the houses are 175 feet long by 26 feet wide and the other two 100 feet by 26 feet. The addition of the four houses to the 10 buildings already located on the West Deerfield farm will make it one of the largest flower growing plants in western Massachusetts. Ground has already been broken for the new buildings which will be ready for use by fall.

President William M. Wood of the American Woolen Company has donated five cups that will be awarded at the flower and vegetable show of the Lawrence, Mass., Horticultural Society that is to be held in City Hall, Friday and Saturday, Sept. 5 and 6.

A gladiolus association has been formed at Mansfield, Mass.

The Florists' Club of Albany, 100 strong, were entertained by the Lenox Horticultural Society at their field day last week. The visitors, besides being entertained at luncheon and dinner and participating in field sports, were shown through many of the larger estates in Lenox, Stockbridge and Great Barrington.

NEW YORK STATE.

There will be a meeting of the New York Federation of Horticultural Societies and Floral Clubs in Commissioner Wilson's Office at the State Fair Grounds in Syracuse, N. Y., at 2 p. m. Wednesday, September 10th.

William Roemer, 60 years old, a florist of 367 East 234th street, New York city, was knocked down by an automobile at 233d street and Webster avenue, The Bronx, and died two hours later.

IMPORTANT CHANGE IN BOSTON.

The name of the prominent greenhouse concern known as A. Leuthy & Co., has been changed to the A. Leuthy Co., and the business has been incorporated. The change is an important one, as four men well known in the trade have joined the company as active members. They are W. Rosenthal of the Boston Cut Flower Co., on Bromfield street, John T. Slater, Louis Nelson & Martin Cuniff. Messrs. Slater, Nelson & Cuniff were formerly in the employ of W. W. Edgar. They will put into their own business the fruits of their long years of practical experience. With the addition of this new blood, there will be an expansion of the business. Mr. Leuthy has recently been to New York and Philadelphia and has sent back a large amount of greenhouse material, including many palms. The Leuthy establishment is among the best known in greater Boston and famed for the variety of plants which it handles.

IOWA FLORISTS

The 17th annual meeting of the Society of Iowa Florists was held Thursday of this week at Des Moines. The program was as follows:

President's Address, J. T. D. Fulmer, Des Moines.

Right Now more depends upon the Soil than ever before! You would not expect your Horse to work without food? Neither will your soil produce crops without fertilizer. Growers are using more fertilizers than ever before and to meet this demand we have organized

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One of the best known men in the middle west and with a wide experience in all branches of



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Our products are for the Greenhouses, Commercial Growers, Landscape Gardeners, Private Gardeners.

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Secretary's Report, Wesley Greene, Des Moines.

The Value of a Florists' Club as a Business Asset to the Profession, William Goos, Davenport.

The Value of an Exposition to the Trade, Arthur H. Smith, Boone.

Commercial Fertilizers That Are of the Most Value to the Florist, George F. Kurtzweil, Des Moines.

The Effect that Quarantine No. 37 of the Federal Horticultural Board Will Have on the Florists' Trade, Blaine Wilcox, Council Bluffs.

The Park as an Educational Factor in Promoting Civic Improvement, and Its Value to the Florist, G. A. Heyne, Dubuque.

What It Costs to Produce Florists' Stock, J. S. Wilson, Des Moines

The second annual Mid-west Horticultural Exposition will be held at Des Moines, Nov. 11 to 14. Over \$1,000 has been offered in prizes for flowers and plants.

BOSTON.

The annual exhibition of the products of children's gardens will be held at Horticultural Hall next Saturday and Sunday. There are 183 prizes offered for displays of vegetables and

flowers grown by children under 18 years of age in their home and school gardens.

The total amount of prizes offered is \$250, of which \$100 is given by the State Department of Agriculture for the encouragement of gardening among the children of the Commonwealth. In addition the Massachusetts Horticultural Society offers silver and bronze medals to be awarded to the children for the best gardens in 30 cities and towns within ten miles of the State House.

Indications point to a large exhibit by the children, as the interest in home and school gardening is steadily increasing. The exhibition, which is free to the public, will be open Saturday from 12 to 6 and Sunday from 1 to 6 o'clock.

CHICAGO.

The newest house in the wholesale market is that of Frank S. Ayres and the word retail also appears in the sign. For many years Mr. Ayres was best known through his association with his brother-in-law, Charles McKellar, where his amiable disposition won for him many friends. In making the start for himself in Room 201 at 30 E. Randolph street, he has the best

wishes of all in the trade for success.

O. A. & L. A. Tonner at 30 E. Randolph street, have all the enlargements in their place of business now complete. They are one of the best known houses in the wholesale market and this is the third time they have been obliged to enlarge their quarters. The father of the present members of the firm was one of Chicago's pioneer florists, making a specialty of growing violets and was one of the founders of the wholesale market in Chicago as it exists today.

H. E. Humiston, president of the new Proto Feed & Guano Co., at 4121 S. LaSalle street, reports the convention as one of unusual importance from the commercial standpoint. He says in general that all salesmen appeared busy and that there were more orders to be placed than the representatives of the allied trades could take care of.

Philip Schupp, president of the J. A. Budlong Co., went East following the Detroit convention, where he expects to spend two or three weeks.

Miss Nettie Parker spent a delightful two weeks visiting the Yellowstone Park, which she considers the most wonderful of all the places she has visited.

WE ARE SPECIALISTS IN GREENHOUSE GLASS

Free from Bubbles
Uniform in Thickness

PAINTS and PUTTY

Greenhouse White (Semi-Paste) The
Paint Particular
Florists Prefer

It will pay you to get our estimates.

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251 Elm Street BUFFALO, N. Y.

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MASTICA
For Greenhouse
Glazing
USE IT NOW
F. O. PIERCE CO.
12 W. BROADWAY
NEW YORK

Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Lasts longer than putty. Easy to apply.

When writing to advertisers kindly
mention **HORTICULTURE**

KEEPING TRACK OF COSTS.

J. A. Neal of Toronto, Canada, believes in knowing the cost of running his business. The method which he uses for keeping track of the cost of his delivery service may be of interest to other florists. A standard-size letter sheet is used, containing the following form which is required to be filled out daily by each driver:

Date	
No. of Deliveries.....	
Daily Mileage	
Repairs	
Oil	
Gasoline	
Tire Pressure	
Tues..... Fri.....	
Signature	

CLASSIFIED DIRECTORY

Advertisements in this Department, Ten Cents a Line, Net

ASPARAGUS PLUMOSUS

Asparagus plumosus seedling: \$1.00 per 100; \$7.50 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

BULBS

C. KEUR & SONS, HILLEGOM, Holland. Bulbs of all descriptions. Write for prices. NEW YORK BRANCH, 8-10 Bridge St.

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For the best Up-to-Date Cannas, get new price list. THE CONARD & JONES CO., West Grove, Pa.

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Carnation Plants: Matchless, \$15.00 per 100; Perfection and Alice, \$12.00 per 100. ALFRED M. CAMPBELL, Strafford, Pa.

CARNATION STAPLES

Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c.; 3000 for \$1.00 postpaid. I. L. PILLSBURY, Galesburg, Ill.

CELERY PLANTS

Celery plants, Easy Blanching; now grown exclusively by 90% of Kalamazoo growers in place of Golden self Blanching. Strong plants, ready for the field; \$2.25 per 1,000, \$6.00 for 3,000. Cash. BRILL CELERY GARDENS, Kalamazoo, Mich.

DAHLIAS

Peony Dahlias Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker, Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

GOLD FISH

Gold fish, aquarium plants, snails, castles, globes, aquarium, fish goods, nets, etc., wholesale. FRANKLIN BARRETT, Breeder, 4815 D. St., Olney, Philadelphia, Pa. Large breeding pairs for sale. Send for price list.

KENTIAS

Kentia Belmoreman—Averaging 3 and 4 leaves, good strong plants out of 2 1/4-inch pots at \$15 per 100—larger quantities on application. J. H. FIESSER, 711-741 Hamilton Ave., North Bergen, N. J.

ORCHIDS

HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laelio-Cattleyas our specialty. One trial order solicited.

PEONIES

Peonies. The world's greatest collection, 1200 sorts. Send for list. C. BETSCHER, Canal Dover, O.

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Poinsettias, 3 inch, \$15.00 per 100, 2 1/4 inch, \$12.00 per 100; \$100.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

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Three, New, Beautiful, Hardy Climbing Roses: Victory (light pink), Freedom (The Climbing White American Beauty), F. R. M. Undritz (dark pink). Read the descriptions in the 1918 and 1919 American Rose Annuals. Strong plants out of 2 1/2 in. pots, \$2.00 each. The above three for \$5.00, \$10.00 per 1000. Not less than 250 of one kind sold at thousand price. REINHOLD UNDRITZ, S. I. Plant Nursery, West New Brighton, N. Y.

SPHAGNUM MOSS

Live Sphagnum Moss, orchid peat and orchid baskets always on hand. LAGER & HURRELL, Summit, N. J.

VINES

Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. J. H. TROY, Mount Hissarlik Nursery, New Rochelle, N. Y.

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HELP WANTED

WANTED—An Orchid Grower. One that is competent to take charge of the growing of Orchids. State experience, reference and salary expected. W. J. & M. S. VESEY, Fort Wayne, Ind.



When you see it you'll want it; when you want it you'll get it; when you get it you'll be proud of it.

Ans.: Advance Sash Operator.

Catalog Free

ADVANCE CO., Richmond, Ind.

This information is on the inside of the sheet. On the outside is a complete record of the deliveries made during the day. Mr. Neal has compiled a cost of delivering a parcel for six average months last year.

May	\$.169
June .....	.258

September .....	.46
November .....	.217
December .....	.135

The overhead was the same for all months. September was a quiet month so the cost was high. The average cost per parcel was \$.251.

—Canadian Florist.

THE BOILER OF Unequalled Fuel Economy

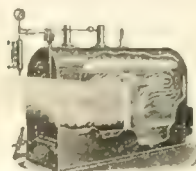
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
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No Masonry—No Tubes



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When You Buy — Get a Kroeschell

3,016,386 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST WINTERICH,
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Kroeschell Bros. Co., 466 W. Erie St.
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FEED YOUR SOIL AS YOU NEVER DID BEFORE!

WHY
THIS
YEAR

BECAUSE the World needs all that you can produce

BECAUSE you must have all that the soil can produce in this time of high costs and great expense

So Feed Your Soil! Not Just Any Thing, but the Food that Your Particular Soil Needs;

MAGIC BRAND FERTILIZER

Analysis at Cost—will be made for you if you are in doubt.

MAGIC BRAND FERTILIZERS are made up almost entirely of Vegetable and Animal matter with nothing added for weight or filler.

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4166 S. Halsted St., Chicago, Ill.

In writing to Advertisers kindly mention Horticulture

HORTICULTURE

Vol. XXX

SEPTEMBER 6, 1919

No. 10

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.

RUSSELLS, PREMIERS, COLUMBIAS



We have a large supply of very choice quality. Per 100, \$10.00, \$12.00, \$15.00, \$20.00.

NEW CROP
AMERICAN BEAUTIES
Per 100 \$20.00, \$25.00, \$30.00, \$35.00

ASTERS
Excellent quality, all colors and in quantity. Per 100 \$3.00, \$4.00, \$5.00, \$6.00.

GLADIOLI
Not so plentiful, but still good. Per 100 \$3.00, 4.00, \$5.00.

DAHLIAS
The Dahlia season is now open. We offer a large assortment of the choicest varieties, \$3.00, \$4.00, \$5.00 and \$6.00 per 100.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.
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S. S. PENNOCK COMPANY
The Wholesale Florists of Philadelphia

NEW YORK PHILADELPHIA BALTIMORE
117 W. 28th St. 1608-1620 Ludlow St. Franklin & St. Paul Sts.
WASHINGTON, 1216 H. St., N. W.

Winter-Flowering Roses

AT REDUCED PRICE TO CLOSE OUT

We have a small surplus of about 3,000 ROSALIND (The Improved Ophelia), strong plants out of 3½-inch pots, which we are offering at a specially low price to clean out, viz.:

\$25.00 per 100 — \$200 per 1,000

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We have a splendid lot of ferns in the following varieties and sizes, for immediate shipment, viz.:

NEPHROLEPIS	Each
Elegantissima, Elegantissima compacta, Muscosa, and Superbissima, 3½-inch pots	\$0.35
Dwarf Boston, 3½-inch pots	.25
Dwarf Boston, 8 -inch pots	2.00
Elegantissima, Elegantissima compacta, and Superbissima, 6-inch pots	.75
Muscosa, 5-inch pots	.75
Elegantissima and Elegantissima compacta, 8-inch pots	2.00
Elegantissima and Elegantissima compacta, 10-inch pots	4.00
Harrisii, 8-inch pots	3.00

F. R. PIERSON, Tarrytown, N. Y.

FERNS

Boston and Scottii, pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

5-inch \$4.80 per dozen — \$35.00 per 100

Alyssum Giant Double, Heliotrope, Lantanas, English Ivy, Swainsona, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts. For immediate shipment from 2-inch pots \$2.50 per 100, \$22.50 per 1,000.

Hardy English Ivy, Double Giant Alyssum, strong plants from 3-inch pots, \$3.50 per 100.

Coleus Brilliancy or Christman Gem, 2-inch, \$3.00 per 100.

Send for Catalogue

R. Vincent, Jr., & Sons Co.
WHITE MARSH, MARYLAND

CYCLAMEN PLANTS **Farquhar's Gold Medal Strain**

Strong Plants in 3½ in. pots, \$25.00 per 100
Trade Price on Application

R. & J. FARQUHAR & CO. - - BOSTON, MASS.

IF in need of **RELIABLE NURSERY STOCK**

that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**

Wholesale and Retail

NORTH ABINGTON, MASS.

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NURSEYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's Fund for Market Development, also "Say It With Flowers" Publicity Campaign.

A Card This Size

Costs only 90c. per Week
on Yearly Order

It would keep your name and your specialty before the whole trade.
A half inch card costs only 45c. per week on yearly order.

We are Headquarters for the **BEST OF EVERYTHING**
IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties
Thoroughly tested at our trial grounds, Raynes
Park, London, England. Send for Catalogue
CARTERS TESTED SEEDS, Inc. 166 Chamber of
Commerce Bldg Boston, Mass.

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BOLGIANO'S 1919 SUMMER AND FALL
CATALOG OF "BIG CROP" SEEDS

Special Prices for
Florists and Market Gardeners.
Write for a copy at once—it will save you
money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.

STUMPP & WALTER CO.

Seeds and Bulbs

30-32 Barclay Street
NEW YORK CITY

SEEDS, BULBS, PLANTS

JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

BURNETT BROS. Seeds, Bulbs, Plants Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

W. E. MARSHALL & CO. SEEDS, PLANTS AND BULBS

Horticultural Sundries

166 W. 23rd St., NEW YORK

GARDEN SEED

BETT, CARROT, PARSNIP, RADISH and
GARDEN PEA SEED in variety; also other
items of the short crop of this past season
as well as a full line of Garden Seeds, will
be quoted you upon application to

S. D. WOODRUFF & SONS
82 Day St., NEW YORK and ORANGE, CONN

FLORISTS

Send us a list of your re-
quirements in FRENCH
and HOLLAND BULBS
also PERENNIALS, for
special prices.

J. M. THORBURN & CO.

53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON

SPECIALIZE IN

SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or
Forward

Only Address, LANGPORT, Eng.

FREESIA PURITY

IMPROVED

Per 1000

¾ to ½ inch..... \$6.00
½ to ¾ inch..... 9.50

AMERICAN BULB CO.

172 W. Wabash Ave., CHICAGO, ILL.

Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds.
Improved styles in Implements
Catalogue upon application.

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BOSTON, MASS.

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Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Direc-
tory bring big returns to both advertiser
Anything wanted by florists, gardeners,
park and cemetery superintendents, etc.,
can be sold through this medium.
Don't fail to read over these Ads. in each
issue and you may find one or more that
will prove profitable to you.

When writing to Advertisers kindly mention **Horticulture**

Society of American Florists and Ornamental Horticulturists

NATIONAL PUBLICITY CAMPAIGN.

With the enthusiasm expressed at the Detroit Convention of the Society over the very excellent results forthcoming from the Publicity Campaign, the promotion of the fund of \$100,000 should take on new life. Nobody now has any doubt as to the efficiency of the Campaign, and the collection of the fund simmers down to a florist's own conscientious thought as to how much he shall give. Our workers fully believe that every florist intends to pay his way into this marvelous project for the stimulation of his business, and if you, Mr. Reader, have not already subscribed, rest assured that your subscription is expected.

Your Secretary was delighted a day or two after his return to New York from the Convention, to receive the following letter from one of the "bright lights" in the trade:

"Philadelphia, Aug. 26, 1919.

Mr. John Young, Secretary,
1170 Broadway, New York City.

My Dear Sir:—Making good my promise of a year or so ago, of contributing to the Publicity Campaign, I am sending you a check for five hundred dollars for the Publicity Committee. You are surely doing good work, and I admire your zeal.

Cordially yours,

H. H. BATTLES."

The florist who is wondering what amount he should subscribe need not hesitate. If he thinks later that he has "under-subscribed," he can very easily make an additional subscription. Such additional aid is weekly to be noted in the list which our good friends, the trade papers, publish in practically every one of their issues.

The Publicity Committees are now called upon to vote large appropriations for publicity which will be greatly needed in the coming season. It is to the best interests of the trade to see that the money for all this is forthcoming.

Your Promotion Bureau would like to hear from florists having sites where could be located big bill board signs carrying the slogan "Say it with Flowers." Many florists are located along railroads and much traveled

highways where such signs could be advantageously displayed. Arrangements have been made whereby such a sign can be provided for about \$50, made of metal, in knock-down form, and as handsome as a skilled artist can make it. It is 7½ feet wide by 20 feet in length, and decidedly ornamental. Your committees will furnish one for the price named, but, of course, cannot father any other expense attaching to it. Quite a few have already made request for a sign, and our committees have felt warranted in entering into a contract which will allow of the supply of signs at the low price mentioned. The Secretary will be pleased to furnish any further information on this subject which may be desired.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

H. H. Battles, Philadelphia, Pa.	\$500.00
Traendly & Schenck, New York, N. Y.	150.00
Kroeschell Bros. Co., Chicago, Ill.	100.00
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The Friedley Co., Cleveland, O.	(add'l) 15.00
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H. L. Thompson, Rochester, Pa.	(add'l) 10.00
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Pres. J. F. Ammann fee paid by A. L. Randall Co. for drawing lucky number on A. L. Randall Co. donation of set of furniture at Convention and arranged to be turned into Publicity Fund	5.00
Mrs. S. Richman, Milford, Mich.	5.00
Claude Wiseley, Murphysboro, Ill.	5.00
W. G. Eisele, Long Branch, N. J.	25.00
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Kaupps Greenhouses, Nevada, Mo.	5.00
R. H. Comstock, Milford, Conn. (1 yr.)	5.00
Emil Riepel, Rochester, Minn.	15.00
Mrs. E. A. Moore, Harvard, Ill. (add'l)	5.00

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Total \$48,454.00

JOHN YOUNG, Secy.

1170 Broadway, New York, N. Y.

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	Per 100	Per 1000
BOSTONS 2½ inch	\$6.00	\$50.00
ROOSEVELTS	6.00	50.00
WHITMANI	6.50	55.00
WHITMANI COM- PACTA	6.50	55.00
VERONA	6.50	55.00
TEDDY, JR.	6.50	55.00

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Order either direct or through
S. S. Skidelsky & Co., Sole Agents
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HENRY H. BARROWS, WHITMAN, MASS.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

POINSETTIAS

2½ inch, \$10.00 per 100
\$90.00 per 1,000

EUPHORBIA JACQUINIAE FLORA

2½ inch, \$16.00 per 100
No C. O. D. shipments.
Write for Prices.

L. J. REUTER CO.

PLANT BROKERS
829 Waverly Oaks Road, Waltham, Mass.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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Eureka. New variety, very fine Chinensis x Obconica. Large flower, extra fine color, 2½-in.....	7.50	65.00
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Purity (Improved)

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McHUTCHISON & CO., The Import House
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FIRE DESTROYS WESTCOTT FARM BUILDINGS.

A bad fire occurred recently at the Westcott Farm, Waretown, N. J., resulting in the loss of the cow and horse stables, the barn, the wagon sheds, and other outbuildings and their contents—including wagons, harness, farming implements, etc., and twenty-five tons of newly stored hay. The gray mare, so familiar to Mr. Westcott's summer visitors, lost her life, but the bay horse was got out in time. The other live stock fortunately happened to be out in the fields when the fire started. The loss on the buildings and contents is estimated at five thousand dollars, and we regret to say the place carried no insurance. The sympathy of the trade is freely extended to Mr. Westcott in his misfortune. The dwelling house and its surroundings on the farm escaped injury as the wind was from the north-west. This was fortunate as if it had been from the southeast everything would have gone. Origin of the fire unknown, but supposed to be from the accidental dropping of a match in the horse stable. Of course, the bungalow also escaped, it being about a half mile nearer the shore.

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Duke of Connaught, crimson.....	\$1.50	\$12.50
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Send for New Wholesale Price List if you haven't a copy

MICHELL'S SEED HOUSE

518 Market St., Philadelphia

HORTICULTURE

Vol. XXX

SEPTEMBER 6, 1919

No. 10

GARDENERS' CONVENTION AT CLEVELAND

The Annual Convention of The National Association of Gardeners opened in the ball room of the Hollenden, Cleveland Ohio, at 2 P. M., Tuesday, August 26.

The address of welcome was made by F. C. W. Brown of Cleveland in the absence of W. G. Waite, Director of Public Utilities, who was to have given the address, but was unavoidably detained. Mr. Brown made a plea for co-operation and organization and for voicing opinions of the members on the floor of the convention hall, that co-operation did not mean agreeing to everything presented, but meant an honest expression of difference.

The response was made by ex-President Thomas W. Head of Chicago, who spoke of the surprises that he had met with so far in Cleveland. He said that the rhododendrons were the finest he had ever seen in the West.

President Robert Weeks was next introduced by Mr. Brown. He made a plea for the uplifting of the professional gardener and for the service department which the organization was contemplating establishing. He said "If we are to make this association a factor for service, we must advertise it more; we must have a fund for publicity—such a fund as the Society of American Florists have established. I bespeak your earnest attention in this convention to the problems of health; to the enlisting of young men in our profession. If we are to secure the right standard of young men, we must elevate our profession. The great stumbling block seems to be the social standing that a gardener receives. It is only by elevating the social standard of our members that we shall obtain social standing.

"Diplomas should be given showing the standing in the association. This will prove to be a great uplift to the profession." He then went on to speak of quarantine ruling No. 37. He termed it a serious setback to horticulture, and spoke of its absurdities and

THE NEW OFFICERS.

President	
L. P. JENSON.....	St. Louis, Mo.
Vice-President	
MR. McINTOSH.....	Minnesota
Treasurer	
THOMAS. W. HEAD.....	Illinois
Secretary	
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WM. H. WAITE.....	New Jersey
ARTHUR SMITH.....	New Jersey
ROBERT WEEKS.....	Ohio
WM. H. GRIFFITHS.....	Michigan

inconsistencies of the measure, which is a fact very well known. He recommended that rigid inspections should be substituted, and that the association should go on record to endeavor to secure some modification of this ruling. Applause followed President Weeks' address.

The report of the Secretary, for 1917, of the Chicago meeting followed. There was no 1918 report, on account of no meeting being held due to the war. The report was accepted as read.

At this time Acting Mayor, D. Marshall who announced himself as being the leading booster of Cleveland, spoke. He made a glowing presentation of the city of Cleveland and tendered the convention of the National Association of Gardeners the freedom of the city. This was followed by the Secretary's financial report, which was accepted as read.

In the Secretary's annual report he announced there was 868 active members of the association.

The Treasurer's report of August 20, 1919, showed a balance in the treasury of 2,387.13. This was followed by the reports of the committees.

On Tuesday, Aug. 26th, at 8 p. m., J. Otto Thilow of Philadelphia gave his beautiful and entertaining illustrated lecture on the "Flora of Hawaii."

The visiting ladies, some fifteen of them were entertained at a theatre party at the Hippodrome while the men were taken on a tour of the parks, stopping at the country estates of F. F. Prentiss where R. P. Brydon is superintendent and at S. L. Severance's. Arthur Brown is in charge here and he was pleased with the many compli-

mentary remarks made. There are 90 acres of lawn to be kept in condition and it was in condition too. There was a very large kitchen garden, a large and beautiful flower garden, terraces, sunken parterre, Shakesperian garden, six greenhouses in excellent order.

Mr. H. V. Horwath, the landscape architect, was on hand to receive the guests and the rare trees and shrubs elicited very favorable remarks by the experts present. Mr. Prentiss's estate came in for its share of favorable comment too.

The banquet occurred at the Hollenden at 8 p. m. About 150 were at the tables. Philip Foley of Chicago acted as toastmaster and had a splendid assortment of bon mots. Congressman M. L. Davey gave a talk on the beauty of the flowers and especially on the patriotic duty of today that faces the gardeners of America. A musical program of popular airs, jazz music, and old time songs was rendered while the banquet was in progress.

Mrs. Ella Grant Wilson offered the Society a slogan which she supported with a short talk. Her idea was that "Make America Beautiful," said for the gardeners what the florists slogan, "Say it with Flowers," represented to the florists.

A general discussion took place about the proposed Service Bureau and the financing of the project. It was suggested that employers be asked to take out sustaining memberships as they could easily secure gardeners by belonging to the association.

Mr. Ebel urged co-operation between landscape architects and gardeners and said it would work for the betterment of both.

The Convention then adjourned and luncheon was served in the Lounge. Congressman M. L. Davey here gave his address on "The Future of Horticulture." Among other things Mr. Davey spoke on Quarantine 37. After giving a clear insight into the workings of a Congressman's heart he said that the thing to do to get impartial and just action on Quarantine 37 was for each man to write to his congressman asking for a hearing before the Agricultural Committee before Congress.

Convention Notes

Carl Hagenburger of Mentor Ohio, decorated the stage with palms, ferns and cherries. He also had a fine display of the Cleveland Cherry and Oregon Queen. A beautiful specimen of *Rhaphis Flabelliformis* which was eleven to twelve feet high and in a 24-inch tub was placed in the center of the lobby of the hotel and was greatly admired for its perfectness. This was also exhibited by Carl Hagenburger.

The only woman delegate present, in fact the only woman member of the Association was Mrs. J. MacMachan of Tuxedo Park, N. Y. She is the only superintendent of an estate, and has charge of the Geo. F. Baker estate containing some 40 acres and manages not only the kitchen garden but some 7,000 feet of glass. When her husband died she took his place and has conducted it to the satisfaction of Mr.



Martin C. Ebel, Reelected Secretary

Baker ever since. She has two daughters, one a High School teacher and the other still in school. Mrs. MacMachan specializes in orchid growing.

An interesting display was the I. J. Grullemo Co. exhibit of Gladioli. They have some 40 acres to Gladioli and they expect some good results from hybridizing that is now going forward on the farm. Their nurseries are located at Avon on the Lake, Ohio.

The exhibit of John Davey, the tree doctor was of great interest to all the gardeners and elicited much comment. Cross sections and pieces of bark showed the deadly result of insect work. Profesor Sharer and Mr. Hollister were in charge of the exhibit.

The President's Address

In the course of his address the President said:

One of the most important steps the Association has made has been the moving of the Association's office from Madison, N. J., to 286 Fifth avenue, New York. This was done to have a more convenient, and accessible office, where estate owners could come to the Association's office and meet with the man that they wished to engage.

This, in my opinion was a sensible thing to do. That this is a decided advantage, is proved by the use the estate owner has made of the New York office. It is going to cost us more to run this office properly. But gentlemen, the year 1919 finds our Association in a good healthy condition, despite the fact that we have just emerged from the great war. And the time has come, and you are demanding, that this Association fulfill the purpose for which you created it, namely, "to uplift the profession of gardening."

Yet, how many estate owners know that there is such an organization as the National Association of Gardeners. How many that it has its office on Fifth avenue? How many know of its Service Bureau? I venture to say very few. True we have done some advertising, not very much. As far as the estate owner is concerned the Association is comparatively unknown. Yet in spite of this as our report will show the Service Bureau has done some good work. We cannot afford to remain obscure and practically unknown. If we are to make this Association a power for the betterment of the profession, and of vital importance and help to its members, we must develop the Service Bureau. We must advertise it more. The Society of American Florist and Ornamental Horticulturists and The National Association of Nurserymen have their publicity funds.

The National Association of Gardeners should have their publicity fund. I do not know the best way to raise such a fund; I will leave that for you to decide. But gentlemen, you should give in this convention some earnest attention to this matter.

The Young Man and the Profession.

One of the greatest problems the gardener has to face today is that of getting capable assistants, or indeed assistants of any kind whatsoever. If we ask ourselves the question. How is this? Various answers might be given. The young man will not enter the profession of gardening today because he does not consider it worthwhile to do so. Other professions he considers offer better opportunities and a better social standing. I think the last named objection is the great

stumbling block of the young man, and to a large extent rightly so.

When we can improve the social standing of the professional gardener, then and only then, shall we find the young man willing to enter the profession of gardening. One way of doing this is by endeavoring to distinguish the difference between the properly trained professional gardener, and the man who calls himself a gardener, and is a gardener in name only. And in this respect I am glad to see that there is a movement on foot to provide for gardeners' examinations.

You will be asked to give these most important questions your earnest consideration and I hope that some workable plan will be found whereby members of this Association might pass examination in the art and science of gardening. And receive a diploma showing their standing in the Association

Quarantine Bill No. 37

There passed into effect on June the first last a bill known as Quarantine Bill No. 37. This bill has been the cause of much concern, to the officers and members of this Association and to the horticultural trade in general. We believe it a very serious setback to the cause of floriculture as we know it.

We will not at this time discuss this bill, its absurdities and inconsistencies are well known to us all.

We will not criticise, the framers of this measure, believe that they had the good of the country at heart.

We would assure them, that we as a body of Practical and Scientific men, recognize the seriousness of the introduction into this country of foreign insect pests, and plant diseases. And we will go further and say that the danger of such introductions should be reduced to a minimum. We believe that by rigid inspection and fumigation and disinfection this could be done. But there is no need to bar out of this country some of the things that this measure keeps out. Therefore, we should give this question our most careful and serious thought during this convention. We should continue to seek some modification of its provisions.

I will conclude my address to you by supplementing the welcome that has already been extended to you today.

We welcome you to our city, a city some of us have learned to love. We love it as a city of business. We love it as a city of homes, but most of all for the citizens that dwell here.

The great human heart of Cleveland.

That great human heart of Cleveland welcomes you

ADVERTISING AT NIGHT.

Charles A. Isselee, of Darien, Ct., is an enterprising nurseryman and landscape gardener. He has an attractive place with a large amount of stock attractively planted close to his office. With the constant passing of automobiles on the state road he found himself regretting that this stock could not be seen after the close of day. Then he began wondering if this could not be made possible. After a little thought he arranged a large electric light and installed it on a tree where it shed its rays over the garden plot. The electricity is turned on from three to four hours at night, and the cost is only about a dollar a month. Mr. Isselee says that he used an arc light, 500 feet of wire, 45 feet of insulating tubing, one 24-inch heavy enameled reflector and one 200-candle power light. The expense for attaching the fixtures and labor for installing amounted to \$233. The light being connected with the fixture in the hall of his home, a considerable amount of wire was required, as the house is 130 feet from the road.



The Light in Use

In speaking of the value of this plan, Mr. Isselee said: "In my opinion the results obtained and the advertising derived has proved invaluable. In these days of fast driving during the day time perhaps one out of ten people see the nursery, for they are past almost before they catch a glimpse of it. At night, on the contrary, the light attracts the attention of the passerby inasmuch as it is set at an angle so that it throws a flood of light on the nursery, with also just a narrow streak across the road. Drivers coming at full speed slow up a little until they know where the light comes from. Comments have been made and inquiries received from many parties, which is taken as a sign that the plan is a success. Certainly it meets my purpose.

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Purity Freesia — Vaughan's Improved

Tie up with a house that has a Record on this Money Making Florists' Flower. Sound, well-ripened bulbs. \$6.00, \$8.00, \$10.00 per 1000.

43 Barclay St.
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VAUGHAN'S SEED STORE

33 W. Randolph St.
Chicago, Ill.

FOREIGN APPRECIATION OF A MASSACHUSETTS LIBRARY.

The Gardeners' Chronicle has a highly appreciative notice of the new Catalogue of the Library of the Massachusetts Horticultural Society. The writer of the article says:

"The reader, but especially the student of horticultural literature, who is interested in the Bibliography of the Garden knows full well the reputation of the library of the great American horticultural society. It is, as the preface to the catalogue tells us, a collection . . . which is believed to be the oldest, most complete, and best organized strictly horticultural library in the world.

"The Massachusetts Library had its earlier catalogues printed in the Society's "Transactions." In 1854 a small separate catalogue containing the titles of 414 volumes, was published; another followed in 1867, with 1,290 titles, and in 1873 a complete catalogue, occupying 155 pages, 8 vo., formed the last issued until this year.

"In the forty-six years' interval many valuable additions have been made, and today the members of the Society have access to no fewer than 22,000 volumes exclusive of a most comprehensive collection of nurserymen's and seedmen's catalogues dating back to 1776.

"As may be readily imagined, many of these additions are rare and costly, but owing to liberal provision by certain well-to-do members there are several funds set apart, the income of which is applied to the purchase of books on botany, horticulture, landscape gardening and kindred subjects. We cannot attempt to enumerate the most valuable of them, but it is pointed out that it was by these means that the Society has been able to add to its store such literary treasures as "The Flora Danica," Sibthorp's "Flora Graeca," Curtis's "Flora Londinensis," Galesio's "Pomona Italiana," and "The Herefordshire Pomona."

The catalogue is arranged in two parts. Part I is an alphabetical list

of authors and titles, and is the one now issued. Part II is a classified arrangement of the same material under subject headings, but at present is not ready for distribution. The two parts together will be an invaluable book of reference. The volume is 4to in size and contains 364 pages in double columns. It is well printed in a neat, clear type and bound in plain dark green cloth.

Authors' names are in heavy type and the information given includes not only the title but size, number of pages, if illustrated and in color, place and date. The cross references are numerous and most helpfully arranged. To the uninitiated many little bibliographical troubles and difficulties are made plain. Where authors' names or dates or other matter is not apparent on the title page of a book the information, so far as it is possible, is supplied in brackets.

"In the library itself, comprehensive as it is, there appear to be not a few omissions. There are still many gardening books to be added, but this is not surprising, for what library or bibliography is there that can be said to be complete? The chief matter for congratulation is that so many rare and valuable books have been got together under the difficulty which exists for those who are in charge of the library, three thousand miles away from the centre of horticultural literary activity. The publication of horticultural books by native American writers is, of course, a somewhat modern development.

"So far, and even without taking into account the promised Second Volume, it may be safely said without any fear of exaggeration that the Catalogue of the Library of the Massachusetts Horticultural Society is the finest catalogue of the finest library of its kind in the world.

"In conclusion, it is worthy of note that acknowledgment is made to Miss Mary Crane Hewett, the assistant librarian, who is mainly responsible for so praiseworthy a result."

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Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

DR. MARLATT ADMITS RESPONSIBILITY FOR THE QUARANTINE ACT

In introducing Dr. C. M. Marlatt, chairman of the Federal Horticultural Board, at the Convention of the Society of American Florists, President Ammann stated that Dr. Marlatt had been asked to speak in the hope that some enlightenment might be given by him on the quarantine situation. The enlightenment which was given consisted very largely in a history of the quarantine, Dr. Marlatt stating that he drew the first act presented to Congress authorizing the quarantine which, being opposed by certain horticulturists through their representatives in Congress, failed to pass. He stated that on the following day he had prepared and immediately presented to Congress another act, the present one, which was passed. He stated frankly that the purpose of the act was to exclude all plants, and that in the application of the quarantine its exclusion had been less drastic than had been at first intended. He stated that about 90% of the bulbs previously imported were now admitted and also numerous plants, e. g., fruit stocks and rose stocks. He felt that the quarantine should be helpful rather than detrimental to growers here and that while it may cause some inconvenience at first the growers would gradually adapt themselves to it and in the end come to realize that Quarantine No. 37 was really beneficial to them. The lecturer occupied over half an hour in going minutely into the history and details of the Act of Congress and Quarantine No. 37.

At the close of his address, he was severely criticized by Professor H. B. Dörner of Urbana, Ill., who stated that he spoke as an individual and not as a representative of his university. He stated that the quarantine as now applied was drastic and might be characterized as an insane measure, that the dangers of insect pests had been greatly exaggerated by the Federal Horticultural Board, and that such dangers did not warrant the sweeping exclusion which had been enforced, and that the bill should be rescinded.

Professor Dörner was followed by Mr. Farquhar of Boston, who vigorously attacked the conduct of the Federal Horticultural Board and the statements just made by its chairman. He stated that at the meeting called at Washington on May 28th, 1918, the Board left the horticulturists with the impression that from three to ten years would be given in which to get in necessary

material and adapt their business to the new conditions to be imposed by the quarantine, the Board on that occasion having assured those present that no drastic action such as actually was taken, was contemplated by the Board. Mr. Farquhar believed that the Board at that time was sincere in its statement, that reasonable action and no drastic measures would be adopted, which opinion had recently been confirmed in Washington. In reply to his query as to why the Board had changed its mind, he was informed that SWEEPING MEASURES WERE THE ORDER OF THE DAY IN WASHINGTON, and the Board had evidently caught the war-time fever. Mr. Farquhar felt that the grossest injustice had been done to the trade by this change. He challenged the statement that 90% of the bulbs formerly imported were admitted now. He believed that of the bulbs used by the trade alone, other than hyacinths, tulips, narcissus and lilies, less than 90% were admitted now. The great amateur interest of the country which has recently acquired such wonderful development through the efforts of the numerous Garden Clubs, had suffered a much greater percentage of loss, and horticulture had been dealt the severest blow by the Federal Horticultural Board by this quarantine than it had ever received in this country. He further stated that Dr. Marlatt's reference to plants which were admitted, was most misleading. Actually no plants other than bulbs or corms were admitted, except lily of the valley. The fruit and rose stocks which Dr. Marlatt classed as plants were not really plants but roots of plants (material for the roots of plants). Not one of these stocks is imported with the intention of growing it into a plant. The great objection of the Board to plants seemed to be the fact that certain plants had soil at their roots and that the soil was a barrier against proper examination. He felt that these plants should be admitted packed in a sterile medium without soil. The repeal of the bill had been asked for. This he felt the Board would never grant, as such repeal would be too great an admission of blundering. Amendments had been freely spoken of, both by the Federal Horticultural Board and other officers of the Department of Agriculture, but inasmuch as any substantial amendment meant the admission of so much error on the part of the Board, that body would be loath to make any amendment. Mr. Farquhar felt that it had not been the Board's intention to make any amendment whatsoever, but regardless of the great, unnecessary injury and injustice done to horticulture and those engaged in it, would stick rigidly to its plan of total plant exclusion as a matter of self-justification. He said that it would be a waste of time to seek any redress from the Board; that redress might be sought from officials higher in authority in the Department of Agriculture, but at present that course did not seem to be any too hopeful. He characterized the policy of the Board as autocratic, cold-blooded and un-American, and of a kind which those engaged in honest, uplifting, refining horticultural pursuits, as American citizens entitled to pursue their lawful business, would not submit to with impunity.

Other speakers were Mr. Joseph Manda and Mr. Lager, who spoke of the injustice which had been done to the orchid men: that orchids brought no injurious insects which would establish themselves in this country, and their business had been cut off by this unfair quarantine. Mr. W. A. Manda, Mr. F. R. Pierson and others spoke against the quarantine, after which resolutions were adopted authorizing the Executive Committee to take all necessary action and employ counsel if necessary to secure the repeal of Quarantine 37.

ROSE GROWING UNDER GLASS

ARTHUR C. RUZICKA.

Be Ready With Steam

Katy-dids have now been singing for some time, and although there may not be anything in the saying about frost only six weeks away, it is a sure sign of fall approaching and cool nights in the early future. The days until late October are generally very hot, so often the temperature will run up to and over 90 in the daytime, the nights following are generally very cool, cool enough to start mildew if no heat is turned on. There are also cold rainy days when steam is absolutely necessary to keep the plants in a healthy growing condition. Keep plenty of air on all the time and never let the temperature go below 64 nights during the fall of the year when the days are real hot.

Sulphur.

With the first pipe of steam around the houses it is best to apply a little sulphur to the pipes whether there is any mildew showing anywhere or not. It will act as a preventive. Apply a little every ten feet or so on one pipe for every ten feet of width in the house and see that the pressure in the pipes at that time does not exceed ten pounds. If the pressure should be higher, the sulphur is apt to evaporate a little too rapidly, making the fumes very strong all at once, which would likely prove harmful to the plants. Do not close the house up after sulphur is applied even if there is a little mildew around. More harm than good will result from this.

Private growers with only small sections in roses and only hot water heat can evaporate sulphur by placing it over the tops of common lanterns and lighting these, one for every 30 feet of a 20 ft. wide house. Do not turn the wick up too high, and the sulphur will only roast and not melt, yet give off fumes enough to destroy any mildew that may be lurking anywhere among the plants.

Syringing.

Lose no chance to syringe as often as the plants will stand it and the weather will permit. With the rainy summer we have had here in the east we are likely to have a dark fall, and if there should be even a trace of spider anywhere it will likely prove

very troublesome for the grower. When cutting, tying or doing anything at all around the plants be sure to keep an eye open for any sign of spider anywhere and mark these places, then when syringing give these an especially good dose. Should spider appear at all bad in some spots it would pay to mix a little salt in water and spray this on with a hand syringe, using a good teaspoonful of salt to a gallon of water. When applying use a solid stream nozzle and regulate the spray with the finger, getting the water well under the leaves where the spider has made himself at home.

However, there is no better remedy for spider on roses than a good stream of clear water properly applied, with proper pressure. When syringing be sure to hold the hose so that water will fall on the fronts of the benches as much as possible. The back rows seldom dry out enough as it is, without any unnecessary moisture being added.

Mulching.

The early planted houses will now be able to use a good mulch without any harm coming of it, and if the plants are at all advanced in growth it will be absolutely necessary. If other work is pressing too hard, apply the mulch to the front rows at least, to protect these from too sudden drying out, which often will either kill outright, or will harm the roots enough to give the plants a set back. The time to apply mulch is when the plants are nicely started toward a crop. Make sure they are wet enough, then dust a little bonemeal over the benches and rub this in a little, being careful not to scratch too deep so as not to disturb the roots. Then apply the manure over it, and water immediately. Use only well decayed manure, applying it lightly to the back rows, and a little heavier to the front rows, being very careful to apply it very evenly and especially well in all front corners of the benches where it will wear away very fast.

In watering be careful not to use too much pressure and then be sure to hold the hose so it will not wash the mulch to the center of the benches, leaving it there to pile up and keep the plants far too wet. Needless to say the benches should be thoroughly cleaned before any mulch is applied, all dead leaves and weeds picked off

clean and taken out of the house, and not thrown under the benches or into the walks to rot and breed bugs and disease and eventually bury and rust out the heating pipes that are there.

Painting Pipes.

Be very careful as to what you use on heating pipes. Under no circumstances use any pipe paint or varnish. This stuff is fine for cold water pipes or for preserving steam pipes in the ground, but for rose houses or in fact greenhouses of any kind, only pure lampblack and linseed oil should be used. And even then ventilate the houses freely when heat is first turned on so the fumes will not do any damage.

COMING MEETINGS AND EXHIBITIONS.

Detroit, Mich.—Vegetable Growers' Ass'n of America, annual convention, Detroit, Mich., Sept. 9 to 13. Sec'y, Sam. W. Severance, Louisville, Ky.

Hartford, Conn.—Conn. Hort. Society Fall Flower Show, Sept. 9, 10 and 11. Sec'y, Alfred Dixon, Wethersfield, Conn.

New Haven, Conn.—New Haven County Hort. Society, annual fall show, Sept. 30 and Oct. 1.

New York City.—The American Institute and the American Dahlia Society, exhibition of dahlias in the Engineering Bldg., 25-33 West 39th St.,

Sept. 23 to 25. Sec'y, William A. Eagleson, 322-24 West 23rd St.

New York City.—The American Institute and the Chrysanthemum Society of America, exhibition of chrysanthemums in the Engineering Bldg., 25-33 West 39th St., Nov. 5 to 7. Sec'y, William A. Eagleson, 322-24 West 23rd St.

Providence, R. I.—Rhode Island Hort. Society, flower show, Sept. 13 and 19; chrysanthemum show, Nov. 13 and 14. Sec'y, Ernest K. Thomas, Kingston, R. I.

San Francisco, Cal.—Dahlia Society of California, fall show at the Palace Hotel, Sept. 4, 5 and 6.

Ardmore, Pa.—Exhibition of dahlias, outdoor cut flowers and vegetables of the Pennsylvania Horticultural Society, Sept. 16-17. Sec'y, David Rust, 606 Finance Bldg., Philadelphia.

Newport, R. I.—September exhibition of the Newport Horticultural Society, Convention Hall, Newport Beach, Sept. 3-4.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

Private gardeners and commercial florists alike are just beginning to appreciate the possibilities of the Regal lily. It has been shown by experiments that this splendid lily is readily forced and that no difficulty is found in having it in full bloom in pots for Easter. It is not at all improbable that within a few years the Regal lily will be a very common Easter plant. It may never take the place of the so-called Easter lily because many people have a prejudice in favor of white flowers for Easter decorations, but there is every probability that it will have a wide sale. Many people who now associate white lilies with Easter will soon learn to appreciate the beauty and lasting quality of this flower, even though it carries a warm color.

That the Regal lily can be forced much earlier than has been done so far is the opinion of the gardeners who know it. Mr. William Anderson, superintendent of the famous Bayard Thayer estate at Lancaster, has a large number of these lilies potted up now and hopes to have them in flower by Christmas. They have already started growth, and there seems to be no reason why Mr. Anderson's hopes should not be realized. Certainly these lilies would make a most desirable addition to the Easter decorations of many homes.

The commercial promise of the Regal lily lies partly in the ease with which it is grown even from seeds. It multiplies rapidly and getting a large stock is only a matter of a few years. It flowers from seed in five years.

Mr. Anderson above mentioned, who is known as one of the most successful private gardeners in the eastern states, has found it a good plan to force lilies for indoor use two seasons without repotting. The second year the lilies make a tremendous growth and fill the pots with roots. When the flowers bloom they are superior in size and number to those of the first year.

A few years ago a great many beds of *Buddleia* of different species were to be found growing in New England. Now these plants have almost disappeared from public parks and from most gardens as well. The intensely cold winter of 1917-1918 was too much for them. One or two small beds are

to be seen in Franklin Park in Boston, and there is a large planting on the Bayard Thayer estate in Lancaster, Mass.

After all this plant does not seem to have lived up to the mark which was set for it at first. Its habit is rather straggling, so that it does not work in well with other shrubs or in the hardy border. Its chief merit lies in the fact that its blossoming season comes at a time when flowers for cutting are not very numerous. It is true that the flowers are rather somber when seen indoors, but if used discreetly they are effective, especially in large rooms. The form known as *magnifica* is undoubtedly the best.

Usually it is not difficult to carry the plants over the winter if they are mounded eight inches or a foot with earth. They will die back almost to this point and should be cut off there. The new growth springs up quickly and flowers the same season.

As a matter of fact it is a very simple matter to grow the *Buddleia* from cuttings or from seeds. It is not because of any tenderness that its popularity is waning, but simply because it has not proved quite as valuable a plant as was hoped and expected at first. This criticism does not apply, however, to *Buddleia asiatica*, the winter flowering species. This is one of the most desirable plants for forcing in the greenhouse and is worth greater attention than has yet been given it.

GROWING CALLA LILIES.

I would like to obtain some information concerning callas. I have some large plants which have been growing since last fall, having been repotted last June. Can I take these plants now and give them a rich soil and larger pots and expect flowers this winter? H. L. C.

Answer. Much increased interest in the growing of callas is now being shown, which is natural with the high prices of the true lilies. The matter is discussed fully and lucidly by William Scott in his excellent book, "The Florists' Manual," as follows:

"Remember one important thing, and that is that the calla comes from northern Africa, and does not want to be starved in a cool greenhouse. There are several ways of growing them. To

begin with, they propagate easily from offsets, which you can take off when repotting the plants in the fall. Some plant them out, but if they have much root room they grow too rampant and the flowers are too large to be useful.

"In early May our houses are too crowded to keep the callas on the bench, and they are taken outside and laid down where they can be covered in case of a sharp frost. The top withers away and for a few months the root is dry. In August we shake off all the soil and start them growing again in 5-inch or 6-inch pots, keeping them in a frame as long as there is no danger of frost, and in winter give them a light house where it is not less than 60 degrees at night. Although almost an aquatic, the soil should be in such condition that the water passes through it freely. For soil use three-fourths of course loam and one-fourth of decomposed cow manure. They want lots of syringing and fumigating, for thrips and red spider trouble the leaves.

"If you want to raise some specimens that will require a 9-inch or 10-inch pot and bear three or four flowers at one time, select some of your strongest plants in May and plant them out two or three feet apart in a deep, rich soil, where you can water them copiously in dry times. They lift easily at the end of September and will make great plants.

"The small offsets or bulblets that come off the corm in August can be potted in 2-inch pots and in May shifted into 5-inch and plunged in a frame. They want a copious supply of water during summer. It is remarkable the strong flowering plants you get from these little bulblets in a few months. As previously said, the calla, when planted out and given liberal space for root growth, is inclined to grow very strong and give few flowers in the dark days. In the bright days of spring you will get lots of flowers from these beds, but the flowers are often unwieldy in size. Growing a good strong corm in a 6-inch or 7-inch pot during winter in a bright, warm house will be found as practical and profitable as any method.

"The calla tubers will bear resting or allowing the soil in pots or beds to become perfectly dry. Those grown in pots are usually placed outside in June on their sides so that the soil may become dry. The top withers and they are kept in this state till early September, when they should be shaken out, given new soil and started growing, and will soon flower. For this seemingly unnatural rest they are not in the least any the worse in health or vigor."

THE GARDENER'S SECTION

CHANGES AMONG GARDENERS.

William Robertson, late with J. W. Pepper, Jenkintown, has been appointed superintendent on the estate of George H. McFadden, Villa Nova, Pa. The McFadden place is quite extensive and one of the most beautiful country residences along the main line.

Harold N. Bryant, formerly gardener on the C. Crane estate, Dalton, Mass., has become gardener on the George M. Hendee estate, Springfield, Mass., where he will assume his duties on September 1.

Herbert Brown, who, previous to entering the service, was gardener to A. M. Lindsay, Rochester, N. Y., has accepted the position of gardener on the Edwin Thorne estate, Babylon, L. I.

John Alexander, lately superintendent of the Charles M. Daniels' estate, Sabattis Park, N. Y., is now superintendent of the Daniel Tatum estate, Glen Cove, L. I.

William Ellings, just back from service in France and prior to that assistant gardener on the George F. Baker estate, Tuxedo Park, N. Y., has taken a position as gardener on the Colgate Hoyt estate, Centre Island, Oyster Bay, N. Y.

John T. Whittaker, formerly gardener to William F. Sellers, Edge Moore, Del., is now gardener to W. Hinckle Smith, Bryn Mawr, Pa.

A NEW ARBORETUM MAGAZINE.

No. 1, Vol. I. of the Journal of the Arboretum is now being distributed. This is a new publication to be issued quarterly and will be edited by the director of the Arboretum. As Professor Sargent says in his introduction, the Arboretum has had no organ on which it could depend to publish within a reasonable time the material which is gathered in its laboratory since the discontinuance of Garden and Forest. The new publication is issued to overcome this difficulty. In its pages will appear notes on trees and shrubs, with descriptions of the new species and their relationships, letters from correspondents and notes on the vegetation of the countries visited by officers and agents of the Arboretum. In the Journal of the Arboretum will appear also such items of news about the institution, its library, collections and projects as will interest botanists, horticulturists and other friends. The current number includes the following articles:

"Notes on American Willows," by Camillo Schneider.

"A Phytogeographical Sketch of the Ligneous Flora of Korea," by Ernest H. Wilson.

"New Species, Varieties and Combinations from the Herbarium and Collections in the Arnold Arboretum," by Alfred Rehder.

"Notes on American Trees," by Charles S. Sargent.

It is a matter of satisfaction to learn that the new publication will not result in the discontinuance of the bulletins of popular information, which will be issued as usual each spring and fall. The Journal will be more technical in character, and will appeal more directly to horticulture experts and institutions engaged in horticultural research. The subscription price is \$3 a year, with a charge of \$1 for each single copy.

GLOBE OR FRENCH ARTICHOKE.

This very desirable vegetable is not so extensively grown as it should be. In fact, it is seemingly but very little known, writes S. W. Carlquist, in the Journal of the International Garden Club. The larger and best kinds are not hardy, that is, they will not readily winter over if left outside during winter, even with the most careful protection. To raise the plants from seeds every year is not very satisfactory as the seedling plants seldom come to maturity the first year and in a batch of seedlings there will always be a number of inferior and useless plants. The best way to produce fine large heads is to grow new plants every year from suckers, or sideshoot cuttings. If young plants of the large variety cannot be obtained to start with the first year one must of course start with seedling plants and select from these the best plants for further propagation.

Sow the seeds early in January, pot up the small plants singly in 2 inch pots and grow near to the glass in a temperature of 60 to 65 degrees, giving the plants a shift into larger pots as required. Towards spring they will occupy 7 to 9 inch pots and the plants should then be thoroughly hardened off. They should be planted out in a deep rich soil as soon as danger of severe frost is past. Give the plants at least three feet of room each way. As the plants come to maturity select such of those as produce the largest and finest heads and mark for further

propagation. In the fall, before heavy frost sets in, dig up these selected plants, cutting back the foliage and some of the larger roots and pot up into large pots, tubs or boxes.

Keep the plants during winter in a cool but frost-free place. In February take up as many of the plants as will be needed for the first batch of cuttings, shake out all the soil from the roots when it will be found that a number of suckers have formed at the base of previous year's flowerstalk. Pull off these shoots, leaving on any small roots which may be formed on them. Pot up these shoots or cuttings into small pots, using a sandy soil, water well and place in a warm house, keeping the plants shaded and free from draft for a few days or until rooted. Repot into larger pots as will be required and handle the plants as described for seedlings. By taking two or more batches of cuttings at different times, one may have a continuous crop of this vegetable from July until late fall. It will be found that every plant grown from a cutting will bear the first season and if one has selected a good strain to propagate from and the plants are given a good rich deep well prepared ground to grow in, some extraordinarily fine large artichokes will be produced. The heads should be cut for use as soon as they are well formed, but before they begin to open in the center. If not used at once they will keep a long time after being cut, by keeping them in an icebox or other cool and dark place. If left too long on the plants they will become stringy and lose much of their fine flavor.

SULPHUR BENEFICIAL TO PLANT LIFE.

From remote ages sulphur has been known to be beneficial to plant life, not only as a partial insecticide and fungicide when combined with lime or a preventive of some fungus parasites when applied in the dry powdered form to various plants and their fruits.

Perhaps the most beneficial results received from sulphur as a preventive and fungicide in the last half of the 19th century was the old English method of mixing 8 parts of sulphur to 2 parts of lime with sufficient water to make it the consistency of thick paint. This mixture was applied to the warm flues; then, later on, to the warm water pipes in the greenhouses. The sulphurous gases from this mixture acted as a moderately safe fungicide.

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It may surprise the average grower to know that plant life in general demands a certain amount of sulphur internally in order to enjoy vigorous health. Take the onion, for instance. This particular bulbous plant absorbs so much sulphur that it is very noticeable in the strong odor thrown off.

When sulphur is properly applied it is easily absorbed into the plant system through the pores of the foliage and cleanses and purifies the life blood or sap of the plants; therefore, the more finely divided the particles of sulphur are the more readily they are absorbed. So we have come down through the ages to the most modern way of applying sulphur by heating it to a molten mass, and by the addition of a certain chemical (to hold it in fluid form), plus the addition of a good grade of fish oil and a little carbolic acid. Now the grower of trees and plants has at his disposal a combined contact insecticide and fungicide that is at once simple, sure and safe and is easily assimilated through the pores of the foliage into the plant system with beneficial results.

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Norwich, Conn.—After experimenting three years, Waterman F. Brown of Palmer street has succeeded in bringing to perfection a seedling dahlia which is attracting the attention of growers throughout the state. It is a decorative bloom of canary tint shot with rich crimson, very large and full petalled. Mr. Brown has named it "The Robert Ogden Fletcher," in memory of Sergt. Major R. O. Fletcher, son of Mr. and Mrs. William L. Fletcher, who was killed Aug. 15, 1918, while with his regiment, the 56th Artillery, at Chartreuse, France.

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M. A. C. TO ERECT FINE MEMORIAL BUILDING

Will Be Built in Memory of the Men
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tion May Start in October.

The Massachusetts Agricultural College alumni will erect one of the finest buildings on the college campus at Amherst in memory of the men who died in service. An alumni bulletin has just been published showing a drawing of the proposed building and describing the details of its construction.

M. A. C. had one of the finest war records of any of the colleges in the country and her alumni are anxious to build a memorial to the men who will never come back. In order to do this, a campaign is under way to raise \$150,000 during the month of October and there is no doubt in the minds of M. A. C. men but what the goal will be reached for everyone is enthusiastic and willing to help. In fact, plans for the new building have been completed and actual construction is expected to start in October.

October 25 will be "aggie night" all over the world wherever there are two or more "aggie" men to get together to discuss plans for helping with the memorial fund.

The new building will be located on the slope just south of the library; an ideal location, and will be used to house the various college activities such as the Collegian, the Senate, the musical clubs, dramatics, the Y. M. C. A. and others and will stand out and apart from all other buildings on the campus.

FLORISTS TO MEET AT SYRACUSE.

Horticulturists from all over the state will meet in annual session Sept. 10 in the Dairy building at the State Fair grounds, Syracuse. Frank R. Pierson, president, has announced the meeting of the State Federation of Horticultural and Floral Societies for that date.

Plans for the erection of a horticultural building to house exhibits of fruit, flower, vegetables, seeds, bees and nursery stock are expected to gain an impetus from this meeting. The following organizations will be represented: New York Florists' Club, Horticultural Society of Greater New York, Tuxedo Horticultural Society, Buffalo Florists' Club, Rochester Florists' Association, Syracuse Retail Florists' Association, Central New York Plant Growers' Club, Syracuse Rose Society, Utica Florists' Club, New York and New Jersey Plant Growers' Association, Tarrytown Horticultural Society, Albany Florists' Club, Mohawk Valley Florists' Association, Nassau County Horticultural Society and the Southern New York Horticultural Association.

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 Roses. We have every facility and abund-
 ant means and best returns are assured
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The House for Quality and Service
ZECH & MANN
 We are Wholesale Florists Doing
 a Strictly Wholesale Business
 30 East Randolph Street, CHICAGO

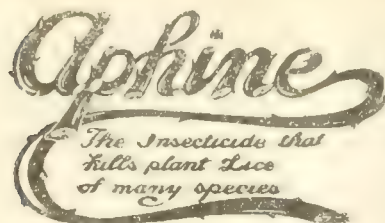
MODEL SUBURBAN PLANTING.
 Plans Being Worked Out by Nursery-
 men's National Service
 Bureau.

The meeting of the New Jersey
 Association of Nurserymen held at the
 Princeton Nurseries on the 22nd was
 devoted largely to a discussion of
 Market Development in its various
 phases.

The meeting was addressed by Mr.
 Robert Pyle of West Grove, Pa., who
 attended in the absence of President
 Moon, who was unable to be present.
 Mr. Pyle pointed out the advantages to
 members of trade associations in join-
 ing the national association, and went
 into some details concerning the work
 of organization and standardization
 which the American Association is
 now planning. Mr. F. F. Rockwell,
 Secretary of the Nurserymen's Na-
 tional Service Bureau, is now en-
 deavoring to get the Department of
 Parks of New York City to put in a
 complete small suburban planting,
 making a model small place at Bryant
 Park, or some other centrally located
 park, in the city. The demonstration
 vegetable gardens which Mr. Rockwell

inaugurated in New York three years
 ago have been very successful, and
 even now that the war is over, are to
 be continued as a permanent feature.
 What has been done to show people
 how to plant and succeed with veg-
 etable gardening could also be done in
 showing them how to plant a small
 area and how to care for the different
 shrubs, flowers, trees, etc., going into
 it. If a demonstration planting of this
 kind can be arranged for in New York
 it is probable that many other cities
 all over the country will take up the
 idea just as they did with the demon-
 stration vegetable gardens.

At the "Own Your Own Home Ex-
 position" to be held in one of the big-
 gest armories in New York early in
 September, the Nurserymen's National
 Service Bureau will have a model
 planting around a small home, and
 distribute the McFarland booklets on
 Home Beautifying and the Home
 Orchard. The trees, plants and flowers
 for this planting have been very
 generously furnished by Isaac Hicks &
 Sons of Westbury, Long Island. Mr.
 Raymore of the Hicks organization is
 co-operating with Mr. Rockwell on the
 arrangement of this small place.



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.

Quart, \$1.00; Gallon, \$2.50.

FUNCINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.

Quart, \$1.00; Gallon, \$2.50.

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For eel worms, angle worms and other worms working in the soil.

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Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to direction, our standard Insecticide will prevent ravages on your crops by insects.

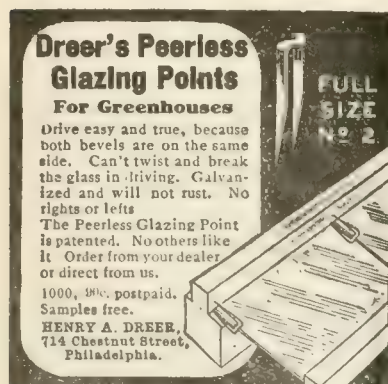
Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

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1/2 Pint, 30c.; Pint, 50c.; Quart, 90c.; 1/2 Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00. Directions on package.

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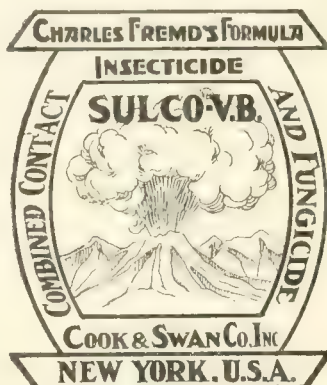
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Your dealer can get Wizard Brand for you if you insist or we will quote with freight rate on any quantity from a bag to a carload promptly.

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In writing to Advertisers kindly mention Horticulture

NEWS AND COMMENT

TRADE HONORS AT THE DETROIT CONVENTION.

The following is the report of the judges of Sections C and D of the Trade Exhibition at the Detroit convention, covering boilers, heating apparatus and greenhouse structures:

American Greenhouse Manufacturing Co., Chicago, Ill.

McKee Boilers—Improvements on sectional boilers. Honorable Mention.

Agemco Circulator. Highly Commended.

Kroeschell Bros. & Co., Chicago, Ill.—New and improved water tube and steam boiler. Certificate of Merit. Refrigerating System. Highly Commended.

Jacob K. Nielson, Box 312, Elyria, O.—Tile bench for greenhouses. Honorable Mention.

Spokane Concrete Flower Pot Machine Co., Spokane, Wash.—Cement pot manufacturing machine. Certificate of Merit.

Fred L. Gunton, Elyria, O.—New patent ventilator arm. Honorable Mention.

Earl L. Hempstead, Bloomington, Ill.—Insectonos. Honorable Mention.

Lord & Burnham Co., Chicago, Ill.—Improvements on sectional boiler and smoke pipe. Highly Commended.

Judges

E. ALLEN PEIRCE,
F. H. TRAENDLY,
F. R. PIERSON.

PHILADELPHIA.

J. J. Habermehl's Sons have been awarded the contract for the banquet decorations for the Knights Templar dinner Sept. 9th. The total is five thousand dollars, including plants, flowers, electric fixings, etc. The conclave of the Knights will last the week here, commencing Sept. 8th, and will be one of the events of the season.

Elmer J. Gehring of Frankford was the host in the return baseball game between the Pennock and Niessen teams on Saturday afternoon, August 30th. The game took place on the grounds of the Richboro Fire Company, Richboro, Bucks County, Pa., and resulted in a score of 9 to 6 in favor of the Niessen team. A feature of the game was the fine work of F. Higgins, a sixty-year-old player on the Niessen side who made three hits, three runs and stole a base on Swan. When the

battle was over Mr. Gehring invited everybody to be his guests and a very nice supper was served in the fire house of the Richboro Company at which everybody enjoyed themselves very much. The eloquent and humorous Charles H. Grakelow was among the speakers of the evening and there were moving pictures and all kinds of fun. A hearty vote of thanks was extended to Mr. Gehring for his hospitality, he having borne personally the entire expense of the entertainment.

The Michell seed store is gay these days with a flower show from their nurseries at Andalusia. Gladioli, asters and a great variety of other outdoor flowers are on exhibition, each variety legibly and correctly named and nicely arranged. This display is not only educative to the vast throngs who pass on Market street, but is also a source of profit, as many orders are booked for delivery at proper season.

Mr. J. D. Hooper and Frank Skinback, Richmond, were recent visitors.

A NEW JUNIPER

A plant which attracted much attention at the Detroit Convention and also at the Convention in Toronto the



Juniperus Mandiana

previous week was that of Juniperus Mandiana, which was exhibited by Mr. W. A. Manda, of South Orange, N. J.

This is a juniper from Africa, and has such unusually good habits of growth that it seems likely to rival the Araucaria as a pot plant. Mr. Manda says that this plant is going to be distributed this year and judging from the high praise which it received at the two conventions where Mr. Manda's exhibits attracted much attention, the plant will soon become popular with florists. It should sell very well indeed, for it seems to have most of the merits which a good house plant should possess.

CHICAGO.

There is a good demand for Boston ferns, the supply of which is not large. The popular desire for the green windows with its suggestion of coolness has called for all available stock during August. Some fine crotons are offered, supplying the touch of color to offset the ferns. A few cyclamen are ready for the market but the demand is not strong.

A. Lange in his new location at 77 E. Madison St., has one of the handsomest retail stores in the loop. The large sales room is artistic in appearance and splendidly lighted by two large windows, affording opportunity to display plants and flowers to good advantage. Herbert Stone, well known to the trade, is manager and this week the windows contain unusual table decorations of his own designing. They have a plateau for foundation from 14 to 18 inches across, and usually one medium sized basket and two tiny ones are glued fast to them. A large high handle completes the design which is colored and decorated with ribbon which harmonizes with the summer flowers and fruits used in it. A particularly pleasing one was of a soft blue and gold. Mrs. E. Thurman, and Martin Neilson, lately returned from France have charge of the design work.

AMERICAN SWEET PEA SOCIETY.

Mr. William Gray, secretary of the American Sweet Pea Society, makes the announcement that the twelfth annual exhibition and convention of the society will be held under the auspices of and in conjunction with the Sweet Pea Exhibition of the Massachusetts Horticultural Society in 1920. It is believed that conditions will have become normal by that time and that a large and successful exhibition will be held, one comparing well with those conducted before the war, when Horticultural Hall in Boston was filled with the flowers of this favorite annual.

EXPLANATION OF PROVISIONS
FOR ENTRY OF PLANT NO-
VELTIES AND PROPAGAT-
ING STOCK UNDER
QUARANTINE

No. 37.

Dear Sir:—Regulation 14 of the regulations relative to the importation of nursery stock and other plants and seeds has been revised and reissued. In its new form it is essentially an interpretation of the old regulation 14 rather than an enlargement of powers under the quarantine, inasmuch as the regulation, as worded in the quarantine as originally issued, was intended to cover exactly what is now more clearly stated in the new regulation. This regulation provides for the importation under a special permit from the Secretary of Agriculture, of limited quantities of otherwise prohibited stock for the purpose of keeping the country supplied with new varieties of plants and stock for propagation purposes not available in the United States. This amendment, however, does not apply to a few plants which have been specifically prohibited entry under other quarantines, as, for example, pines, Ribes and Grossularia from certain countries, and citrus, banana, and bamboo stock.

The following explanations of regulation 14 are given to indicate the limitations under this regulation and the procedure to be followed in making importations of the two classes of plants specified, namely, new varieties and necessary propagating stock.

The expression "New Varieties" is understood to mean plant novelties, that is, new horticultural or floricultural creations or new discoveries.

"Necessary Propagating Stock" is understood to mean stock of old or standard varieties imported for the multiplication of the plants in question as a nursery or florist enterprise as distinguished from importations for immediate or ultimate sale of the stocks actually imported, and such importations will be restricted to stocks which are not available in this country in adequate quantities.

The expression "Limited Quantities" used in regulation 14 is understood to mean with respect both to new varieties and to standard stocks, such quantities as will supply reasonable needs for the establishment of reproduction plantings which may be thereafter independent of foreign supplies.

There is no limitation as to the number of permits for different plants or classes of plants under regulation 14 which an individual may request, but the applications will all be passed upon both as to necessity for the particular importation and as to the quantity adequate for the purpose intended, by experts of the Department, for the information of the Board prior to the issuance of the permits.

All importations under regulation 14 must be made under special permits through the Office of Foreign Seed and Plant Introduction of the Department of Agriculture but for the use of the individual importer. The importer will be required to meet all entry, transportation and freight-handling charges. The Department will make no charge for inspection and supervision. The necessary procedure for making such importations is as follows:

1. The Federal Horticultural Board will supply, on request, an application blank upon which request may be made for a special permit to import. This application embodies an agreement on the part of the importer that if the imported material is found on examination by an inspector of the Department of Agriculture to be so infested or infected with insects or disease that it cannot be adequately safeguarded, it may be destroyed and such destruction will not be made the basis of a claim against the Department of Agriculture for damages. The application must be accompanied by a statement certifying that the plants to be imported are novelties or if standard varieties of foreign plants, that stocks in adequate quantities for their propagation are not available in this country, and that in either case they are to be imported for the establishment of reproduction plantings and not for immediate or ultimate sale of the stocks actually imported. In exceptional cases the importation of novelties may be made for personal use but not for sale. The application must also give the name and address of the exporter, country and locality where the stock was grown, the name and address of the importer and the name and address of the nursery or other establishment where the plants are to be planted and grown for propagation purposes on release.

2. If the permit is issued, the applicant will be furnished shipping instructions and shipping tags to be forwarded with his order to the exporter.

The plants will, in consequence, be addressed in bond to the United States Department of Agriculture, Bureau of Plant Industry, Washington, D. C., United States of America, and indorsed, "Foreign Seed and Plant Introduction, for (insert name of importer)," and arrangements must be made with some responsible agency in Washington for the clearance of the plants when received through the Custom House at Georgetown, D. C., together with the payment of all charges involved.

3. Upon clearance through the Georgetown Custom House the material will be turned over to the Office of Foreign Seed and Plant Introduction by the authorized agent of the importer, and in the specially equipped inspection houses and under expert care as to the welfare of the plants, be carefully examined by inspectors of the Federal Horticultural Board. If found free from dangerous insects or diseases, the shipment will be immediately and carefully repacked and forwarded by express or freight, charges collect, to the importer.

4. Should importers request permits covering the importation of larger quantities of propagating or other stock under regulation 14 than can be housed and cared for in the inspection houses of this Department, and should such request be approved, such importers may be required to provide local storage in Washington for such material during the period of detention for examination and, if necessary, disinfection. Where possible the original containers will be employed for repacking the material but the importer will be required to meet the cost of such repacking and of new containers when such are necessary. Small shipments which can be easily handled will be repacked without charge. For the present the Board will undertake on request to provide for such storage and repacking but reserves the right to require the importer to provide for such work through his own agents.

5. Cleaning and disinfection will occur for slight infestation, but should the material be found to be so infected or infested with either disease or insects that it cannot be so adequately safeguarded, it will either be destroyed, or, when possible and desirable, returned to the point of origin.

Yours very truly,

C. L. MARLATT, Chairman.

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Uniform in Thickness

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Greenhouse White

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Furnished in lengths up to 500 ft. without seam or joint.

The HOSE for the FLORIST

3/4-inch, per ft., 19 c.

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1/2-inch, " 16 c.

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Couplings furnished without charge

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Carnation Plants: Matchless, \$15.00 per 100; Perfection and Alice, \$12.00 per 100. ALFRED M. CAMPBELL, Strafford, Pa.

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Peony Dahlias Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker. Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

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Gold fish, aquarium plants, snails, castles, globes, aquarium, fish goods, nets, etc., wholesale. FRANKLIN BARRETT, Breeder, 4815 D. St., Olney, Philadelphia, Pa. Large breeding pairs for sale. Send for price list.

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HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England, Cattleyas and Laello-Cattleyas our specialty. One trial order solicited.

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Peonies. The world's greatest collection, 1200 sorts. Send for list. C. BETSCHER, Canal Dover, O.

POINSETTIAS

Poinsettias, 3 inch, \$15.00 per 100. 2 1/2 inch, \$12.00 per 100; \$100.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

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Three, New, Beautiful, Hardy Climbing Roses: Victory (light pink), Freedom (The Climbing White American Beauty), F. R. M. Undritz (dark pink). Read the descriptions in the 1918 and 1919 American Rose Annuals. Strong plants out of 2 1/2 in. pots, \$2.00 each. The above three for \$5.00, \$10.00 per 1000. Not less than 250 of one kind sold at thousand price. REINHOLD UNDRITZ, S. I. Plant Nursery, West New Brighton, N. Y.

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Live Sphagnum Moss, orchid peat and orchid baskets always on hand. LAGER & HURRELL, Summit, N. J.

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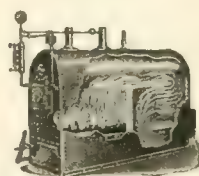
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CHICAGO

Principles and Practice of Pruning

By M. G. KAINS

Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

After a few pages of introduction the author discusses Plant Physiology as related to pruning. A chapter takes up the Philosophy of Pruning, itself a very interesting subject. Then follows a classification and clear discussion of Buds, very fully illustrated from life. How Wounds Heal is an exceedingly interesting chapter, as are also those on Prevention and Repair of Mechanical Injuries, Pruning Nursery Stock, Young Trees, Mature Trees and Odd Methods of Pruning and Training, Revivifying Neglected Trees and Practical Tree Surgery.

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HORTICULTURE PUBLISHING CO.
78 Devonshire St., Boston, Mass.

Plant Propagation, Greenhouse and Nursery Practice

By M. G. KAINS

We have had many inquiries from time to time for a reliable and up-to-date book on plant propagation, but were always at a loss to find any publication that we could recommend. The subject has been dealt with in fragmentary manner only in books that have come to our notice. So it is well that this new work has been issued, especially as it is both comprehensive and practical, and it should meet with a ready sale among plantmen, nurserymen and gardeners. There are nineteen chapters covering in detail topics of germination and longevity of seeds, propagating by buds, layering, cuttings, grafting, etc., fruit tree stocks, scions, etc., and there are eight pages of condensed cultural instructions in tabulated form, covering annuals and perennials from seed, woody plants, evergreens, vines, bulbs and tubers, greenhouse and house plants, ferns, palms, water plants, orchids and cacti. The illustrations are numerous, comprising 213 figures and halftone plates. There are 322 pages well bound and on heavy paper, teeming with helpful information. It is a book which no cultivator can afford to do without. It is worth many times its price. Copies can be supplied from the office of HORTICULTURE at publisher's price, \$1.50.

HORTICULTURE PUBLISHING CO.
78 Devonshire St., Boston, Mass.

HORTICULTURE

Vol. XXX

SEPTEMBER 13, 1919

No. 11

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

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and
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We want you to know them. May we send you full descriptions? Your request will bring it.

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BUSINESS HOURS: Commencing Sept. 15th, 7 A. M. to 5 P. M.

S. S. PENNOCK COMPANY
The Wholesale Florists of Philadelphia

NEW YORK PHILADELPHIA BALTIMORE
117 W. 28th St. 1608-1620 Ludlow St. Franklin & St. Paul Sts.
WASHINGTON, 1216 H. St., N. W.

Winter-Flowering Roses

AT REDUCED PRICE TO CLOSE OUT

We have a small surplus of about 3,000 ROSALIND (The Improved Ophelia), strong plants out of 3½-inch pots, which we are offering at a specially low price to clean out, viz.:

\$25.00 per 100 — \$200 per 1,000

FERNS

We have a splendid lot of ferns in the following varieties and sizes, for immediate shipment, viz:

NEPHROLEPIS	Each
Elegantissima, Elegantissima compacta, Muscosa, and Superbissima, 3½-inch pots.....	\$0.35
Dwarf Boston, 3½-inch pots.....	.25
Dwarf Boston, 8 -inch pots.....	2.00
Elegantissima, Elegantissima compacta, and Superbissima, 6-inch pots.....	.75
Muscosa, 5-inch pots.....	.75
Elegantissima and Elegantissima compacta, 8-inch pots....	2.00
Elegantissima and Elegantissima compacta, 10-inch pots....	4.00
Harrisii, 8-inch pots.....	3.00

F. R. PIERSON, Tarrytown, N. Y.

FERNS

Boston and Scottii, pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

5-inch \$4.80 per dozen — \$35.00 per 100

Alyssum Giant Double, Heliotrope, Lantanas, English Ivy, Swainsona, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts. For immediate shipment from 2-inch pots \$2.50 per 100, \$22.50 per 1,000.

Hardy English Ivy, Double Giant Alyssum, strong plants from 3-inch pots, \$3.50 per 100.

Coleus Brilliancy or Christman Gem, 2-inch, \$3.00 per 100.

Send for Catalogue

R. Vincent, Jr., & Sons Co.
WHITE MARSH, MARYLAND

CYCLAMEN PLANTS **Farquhar's Gold Medal Strain**

Strong Plants in 3½ in. pots, \$25.00 per 100
Trade Price on Application

R. & J. FARQUHAR & CO. - - BOSTON, MASS.

IF in need of **RELIABLE NURSERY STOCK**

that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**

Wholesale and Retail

NORTH ABINGTON, MASS.

BOBBINK & ATKINS

NURSEYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's Fund for Market Development, also "Say It With Flowers" Publicity Campaign.

A Card This Size

Costs only 90c. per Week
on Yearly Order

It would keep your name and your specialty before the whole trade.

A half-inch card costs only 45c. per week on yearly order.

We are Headquarters for the **BEST OF EVERYTHING**
IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg. Boston, Mass.

JUST OUT

BOLGIANO'S 1919 SUMMER AND FALL CATALOG OF "BIG CROP" SEEDS

Special Prices for Florists and Market Gardeners.

Write for a copy at once—it will save you money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.

STUMPP & WALTER CO.

Seeds and Bulbs

30-32 Barclay Street
NEW YORK CITY

SEEDS, BULBS, PLANTS

JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

BURNETT BROS. Seeds, Bulbs, Plants Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

W. E. MARSHALL & CO. SEEDS, PLANTS AND BULBS

Horticultural Sundries

166 W. 23rd St., NEW YORK

GARDEN SEED

BEEF, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

S. D. WOODRUFF & SONS
82 Deo St., NEW YORK and ORANGE, CONN

FLORISTS

Send us a list of your requirements in FRENCH and HOLLAND BULBS also PERENNIALS, for special prices.

J. M. THORBURN & CO.

53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON

SPECIALIZE IN

SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

DUTCH BULBS PAPER WHITES JAPANESE LILIES

Write for prices

AMERICAN BULB CO.

172 N. Wabash Ave., Chicago, Ill.

Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds.
Improved styles in Implements
Catalogue upon application.

16 So. Market Street
BOSTON, MASS.

When writing to advertisers kindly
mention **HORTICULTURE**

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

When writing to Advertisers kindly mention **Horticulture**

Society of American Florists and Ornamental Horticulturists

The Fall Campaign is now about opening and contracts are being placed with a number of magazines for the insertion of a series of advertisements upon which much thought has been bestowed. The Thanksgiving and Christmas advertisements will be particularly striking. Some of the page advertisements will be in color. The magazines selected are: Literary Digest, Collier's Weekly, Outlook, Independent, Life, Metropolitan, American Magazine, Red Book, Sunset, Magazine, Everybody's, World's Work, Munsey's, Review of Reviews, Scribner's, Cosmopolitan and Hearst's, giving a single copy circulation of nearly 18,000,000, or an estimated readers' circulation of 90,000,000, all of the classes from which flower buyers are commonly drawn.

Contracts for some of this advertising are necessarily placed long in advance of the appearance of the magazines. The cost, of course, is heavy, and taxes the resources of our committee, but with what funds are in hand and what is confidently believed will be forthcoming by the time it is required, the committee has felt justified in going ahead with an appropriation of \$20,000.

Now when the number of florists who are to benefit from our publicity is considered, our fund today represents but a very small part. The campaign has been in operation now about twenty months, and all have had experience as to its efficiency. We know that we are getting the results expected, that our work has been most fruitful. Leaders in other lines of business have watched our progress and have adopted our methods—outside proof that we are working in the right direction, should such proof be needed.

The question now is, will this large body of non-subscribers come over and help us? There are few who could not afford to subscribe a dollar a week, although we do not ask that much. Many of our subscribers have pledged themselves for yearly sums which scarcely approach ten cents a week—less than the price of one good cigar nowadays. A subscription of a reasonable amount will not hurt anybody, and it will remove that feeling that something is accepted for nothing. It is not customary for florists to have that feeling; in fact, florists are look-

ed upon as the most generous of tradesmen. Yet, are they generous to themselves or their calling when they hold aloof from a movement which is productive of nothing but good for their industry? If all these non-subscribers would wake up and do what their brethren in the trade expects of them, our efforts could be doubled, and with the doubling would come the advantage of double results. Now is the time for the awakening. Let us hear from you.

New Subscriptions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

The Posh Shop, Fremont, O.....	\$5.00
Helen F. Patten, Toledo, O.....	25.00
Wm. F. Krueger, Toledo, O.....	50.00
Harry Turvey, W. Toledo, O.....	10.00
Otto P. Krueger, Toledo, O.....	10.00
George Clay, Elmore, O.....	5.00
Woner's Greenhouse, Port Clinton, Ohio.....	10.00
Matern Flower Shop, Sandusky, O.....	15.00
Wagner's Greenhouses, Sandusky, O. (add'l).....	15.00
Louis Sprankle, Huron, O.....	7.50
Hody & Tuleo, Lorain, O.....	25.00
F. G. Carek, Lorain, O. (add'l).....	10.00
The L. C. Hecock Floral Co., Elyria, O. (add'l).....	25.00
The McCallum Co., Pittsburgh, Pa. (add'l).....	50.00
Stephen Hyde, Carthage, Mo.....	5.00
H. Mentseke & Sons, Castle Shannon, Pa.....	10.00
Harris & Lever, Niagara Falls, N. Y.....	10.00
J. C. Moninger Co., Chicago, Ill.....	100.00
A. G. Fehr, Belleville, Ill.....	10.00

\$397.50
Previously reported.....\$48,454.00

Total.....\$48,851.50

JOHN YOUNG, Secy.

1170 Broadway, New York, N. Y.

A MESSAGE FROM HENRY PENN.

Are you of the class who feel like waiting for the next customer or are you just a little more ambitious by going after more business in doing things just a little better than your neighbor and who uses the printed word to get your message over, that beautiful slogan, "Say it with flowers" so that all who enter your establishment feel they are using and enjoying the greatest under the sun: FLOWERS.

Do you preach the sentimental as well as the healthful results they bring? And do you let the flower-lover know that they are to be had at your shop? Do you remind Mr. Flower-Buyer that your product is the one product that suits any or all occasions so that if he is in doubt as to

what to say or send, you can tell him to "Say it with Flowers"? Or, are you one of the type who think it unnecessary to continually remind the flower-loving public that we have the greatest product on earth, but too modest to talk about our wares?

Use your slogan "Say it with Flowers" and identify yourself with it often enough so that your name and flowers will be linked together then you will receive the rewards of the efforts of our now famous campaign in which every one should share.

We need \$100,000 to complete our total program so that the dividend will be enjoyed by all. We are still hopeful that there may be some who have overlooked their portion. It will be most opportune now. Bacon once said, that a wise man will make more opportunities than he finds. Here is yours now, make it sure by doing your part.

HENRY PENN.

Chairman National Publicity Campaign.

COTTAGE GARDENS NURSERIES.

The following letter is being sent out by the receivers of the cottage Gardens Nurseries:

Gentlemen:

On July 11th I wrote to you explaining the critical condition of the Cottage Gardens Nurseries.

As conditions have materially improved I feel it my duty to keep you posted of same.

Over \$50,000 in orders have been booked and more are being booked every day. There is no question but that the \$100,000 mark will be reached this season. At the present time we are shipping bulbs.

It was through the courtesy and co-operation of our customers in advancing money on their orders that I was able to arrive at this point. At the present time the local merchants are assisting me by purchasing receiver-ship certificates.

I can frankly state that I can now see daylight, and if more time is given me I will be able to straighten out the affairs of the corporation and eventually pay dollar for dollar to the creditors. I hope by the first of the year to be able to pay a substantial dividend to each creditor, at the same time preserving the industry.

Yours very truly,

G. VANDEN ABEELE,

Receiver.

FERNS

		Per 100	Per 1000
BOSTONS	2½ inch	\$6.00	\$50.00
ROOSEVELTS	"	6.00	50.00
WHITMANI	"	6.50	55.00
WHITMANI COM- PACTA	"	6.50	55.00
VERONA	"	6.50	55.00
TEDDY, JR.	"	6.50	55.00

Stock all sold until June 1st.

Order either direct or through
S. S. Skidelsky & Co., Sole Agents
Philadelphia, Pa.

HENRY H. BARROWS, WHITMAN, MASS.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

POINSETTIAS

2½ inch, \$10.00 per 100
\$90.00 per 1,000

EUPHORBIA JACQUINIAE FLORA

2½ inch, \$16.00 per 100

No C. O. D. shipments.
Write for Prices.

L. J. REUTER CO.

PLANT BROKERS

329 Waverly Oaks Road, Waltham, Mass.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.

ADRIAN, MICH.

Snow Queen Canna

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The CONARD & C. WEST GROVE
JONES CO. PENN., U.S.A.

Robert Pyle, Pres. Antoine Winter, Vice-Pres.
We are subscribers to the Nurserymen's Fund
for Market Development

ROBERT DYSART

CERTIFIED PUBLIC ACCOUNTANT

Simple methods of correct accounting
especially adapted for florists' use.

BOOKS BALANCED AND ADJUSTED

40 STATE STREET . . . BOSTON

Telephone Main 55

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers
in America

BOX 411, DUNDEN, ILL.

The Best Fern Yet!

You all know Duncan McCaw. He has been associated with all the Nephrolepis sports for twenty years and knows them all from the ground up, and he has found and developed a new one. It is a far faster grower than Scotti; and better in every way. He calls it

McCAWI

and those who saw our exhibit of this great new fern at Detroit fell for it right away. We have booked many orders, and if you want to get in on this—GET BUSY NOW.

2½ inch, \$200.00 per 1,000; 6 inch, \$150.00 per 100.

YELLOW CALLA ROOTS.....per 100, \$20.00, \$25.00, \$30.00
FREESIAS—FISHER'S PURITY IMPROVED.....per 1000, 14.00, 16.00, 22.00

C. U. LIGGIT, Office 303 Bulletin Bldg. Philadelphia, Pa.

FALL BULBS

PAPER WHITES, 12-15, 13-15 and 14-16c/m

CALLAS (White), 1½-2" and 2-2½"

DUTCH BULBS

JAP. LILY BULBS

NARCISSUS, Emperor and Empress

PEONIES, RAFFIA, BAMBOO CANES, Etc.

Write for Import Prices

McHUTCHISON & CO., The Import House

95 CHAMBERS STREET : : : NEW YORK

IBOLIUM The New Hybrid HARDY PRIVET (L. Iboia x Oval- folium)

Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery. See page advertisement in this issue, page 244.

The Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.
Introducers of BOX-BARBERRY

SEEDS AND BULBS

Boddington's

128 Chambers St., N. Y. City

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.

IRVINGTON, N. J.

ORCHIDS

We grow and sell nothing but ORCHIDS.
If you are in the market for this class of plants we respectfully solicit your inquiries and orders. Special lists on application.

LAGER & HURRELL, Summit, N. J.

When Writing to
Advertisers Please
Mention
HORTICULTURE

MICHELL'S BULBS

WHITE CALLAS (AETHIOPICA)

Clean healthy bulbs

	Doz.	100	1000
1½ to 1¾ in. diameter	\$1.00	\$7.00	\$65.00
1¾ to 1½ in. diameter	1.30	10.00	95.00
1½ to 2 in. diameter	1.75	13.00	120.00
2 to 2½ in. diameter	2.25	15.00	140.00

FREESIA "PURITY"

Flowers almost twice the size of the regular type, and a pure glistening white

	Doz.	100	1000
First Size Bulbs.....	20	\$1.25	\$10.00

NEW GIANT COLORED FREESIAS.
These varieties are equal to the "Purity" in size; have excellent form and splendid texture.

	Doz.	100	1000
BLUE	\$1.25	\$8.00	\$75.00
LAVENDER	1.25	8.00	75.00
PINK	1.25	8.00	75.00
MIXED. All colors.....	75	5.00	40.00

NARCISSUS, PAPER WHITE
GRANDIFLORA

First Size, 13 cm up (1250 bulbs to case). Per doz., 40c; \$2.50 per 100; per 1000, \$21.00

DUTCH BULBS ARE ARRIVING NOW
Also all other Seasonable Bulbs, Seeds and Supplies. Send for New Wholesale Price List, if you do not receive a copy.

MICHELL'S SEED HOUSE

518 Market St., Philadelphia

HORTICULTURE

Vol. XXX

SEPTEMBER 13, 1919

No. 11

HEATING WITH OIL

Fred C. Hoffman, of Pawtucket, R. I., believes that he has found a solution of the heating problem, a problem which always looms large at this season in the mind of the man who grows flowers under glass in a commercial way. Mr. Hoffman, whose retail store is at 320 Main street, has his range of glass on East avenue, and for years has gone through the usual nightmare with his heating plants. Every season for a long time he had the coal question to bother with, and experienced the usual difficulty of finding a competent night fireman. Now he considers that his troubles are over, for he has installed an oil burning plant at the greenhouses. This is one of the few undertakings of this kind reported by a grower in any of the eastern states. One other concern which is trying out the oil burning system is the Budlong Rose Co., of Auburn. A large part of the boiler equipment on this plant has been fitted out for burning oil.

Both Mr. Hoffman and the Budlong people are using what is called the Fess Rotary Oil Burner. When I called on Mr. Hoffman he forgot all about business, the order I was looking for, and the stock he had to sell. Almost his first remark was: "Say, come on down to my boiler plant. I want to show you something new." What he had to show was certainly new to me, and I was greatly interested in its operation and in what Mr. Hoffman had to say about it.

The idea of having no coal to shovel or to waste and no ashes to handle and a plant clean in every way was one which made a strong appeal to me. Mr. Hoffman finds that one man will do the work where two or more would be needed with a coal burning plant. There seems to be a steady pressure and less boiler capacity is needed than when coal is used. I think it is safe to say that the plan has worked out with good results here and is no longer an experiment. Doubtless there are some drawbacks to the use of oil, but Mr. Hoffman is enthusiastic over the fact that there is no coal cart and no ashes to remove, both of which were disagreeable, not only on account of the labor saved, but because blocking up the thoroughfares

and such features are eliminated.

In times like these when labor is high and hard to get at any price, anything which helps to cut down the number of employees necessary is a direct saving. Under the oil burning system a uniform rate of combustion is maintained automatically by the steam pressure, resulting in a steady temperature and a maximum of efficiency.

There seems to be no question about getting the fuel, as the supply is delivered either by rail or water, and contracts can be made which eliminates worry on that point. On the other hand, it is quite likely that with this system in common use the price of fuel would be materially advanced. There is no reason to believe that greenhouse men in general will do away with their coal heating plants and install oil burners, but the system is one which seems likely to receive increasing attention, and which may be adopted ultimately by many growers as meeting certain conditions in a most satisfactory way. Mr. Hoffman certainly is very well pleased with the result of his venture up to the present time.

NOTES ON FLORISTS' STOCK

A writer for the Canadian Florist has just recorded the observations made on a trip through the United States. He writes as follows:

In a trip made a few days ago through Rochester, Syracuse and Utica I was much amazed at the number of empty greenhouses which justifies the expression that the head has to be used as well as the hand.

Cyclamen were generally showing the effects of the extreme heat of June as these plants love the cool evenings. They are already beginning to show improvement with the advent of cooler weather. *Primula obconica* looked well, but with the non-arrival of early seed, as in pre-war days, were in most cases in smaller pots than usual.

French hydrangeas were fine and as these plants are becoming better known, are increasing in demand. Lorraine and Cincinnati begonias, owing to their poor lasting qualities,

both for shipping and in the house, are fast going out of favor. Ferns were looking well but like most stock showed late planting, largely owing to the scarcity of labor last spring. Gladioli were coming on nicely but the early aster crop seems generally to have proven a failure, as I failed to see one good stand of plants in my travels. Late stock was all right except where they still persist in growing on the same ground year after year, and where blight has naturally followed.

Labor seems more easy when one considers the price one has to pay for it. Added to the other advances, it clearly shows that if the average florist is to continue in business he cannot return to pre-war prices. In fact, I question, after taking everything into consideration, as corporations figure it, if the florist trade would justify an advance of capital. Ranges have to be figured at an advance of from three to four hundred per cent. in glass and piping alone. However, the florist trade is a persistent one and probably the close years just past has given many a florist a new insight into business.

IBOLIUM PRIVET NOW OFFERED THE TRADE.

The Elm City Nursery Company, New Haven, Conn. is now offering for the first time to the trade, *Ibodium Privet*, the new hardy hybrid, for propagating purposes. Mention of this new hardy hybrid privet have appeared from time to time for the last two years so that the trade in general has been waiting for enough stock of it to be propagated so that it could be offered.

When one considers that the new *Ibodium Privet*, which is a hybrid between California and *Ibota*, proves quite as hardy as the *Ibota Privet* and at the same time very closely resembles California in appearance, it is certain the demand for it will be enormous.

At the recent convention at Chicago of the American Nurserymen's Association a special Certificate of Merit was given *Ibodium Privet*. An illustration showing a plant of this new hardy hybrid appears with the advertisement on page 244.

Young Men and Gardening

Mr. Edwin Jenkins of Lenox prepared a very timely and interesting paper for the Gardeners' Convention at Cleveland. It was as follows:

The profession of gardening is one well worthy of the earnest consideration of the youth of America. There are none too high and none too lowly for it. It should be above none, or beneath none. It is undoubtedly, the most ancient of man's occupations, it is assuredly honorable, health-giving, it is inspiring, humanizing and tends to develop the faculties which are too often allowed to lie dormant in man, particularly the faculties of observation and concentration, both of which are very valuable in any occupation. And above all it develops the aesthetic side of humanity, adding much to the amenity of life. And again, if we must view it from the practical side, the bread and butter side, why! it compares favorably with the average run of occupations in the matter of compensation, viewing compensation in its broadest sense.

Looking over the field of horticulture throughout the country, what do we find? We find that a great majority of the men following this occupation are foreign born, a majority amounting to perhaps eighty or ninety per cent. This locality (Lenox, Massachusetts), is a great gardening center, yet in the past quarter of a century not more than ten men of native birth have taken up the profession and gone out as skilled gardeners. It is true that up to the past few years, the men coming from over-seas have kept the ranks fairly filled, but lately, owing to war and other causes there is a great shortage of assistants or journeymen gardeners. But whether the future immigration of gardeners would amend this shortage or not, it seems eminently fitting that some effort should be made to stimulate and arouse interest amongst our own young men, to the end that they would take up and follow this most desirable calling.

Assuming the foregoing to be granted, some concrete suggestions for the amelioration of the shortage of native born pupils in the profession of gardening is in order.

First, and the prime requisite, is for the present masters of the profession, the head gardeners and superintendents to be willing (and to let that willingness be known to the secretary of the N. A. G.) to take one or more pupils each year according to the size of their places.

Second—Let this organization appeal to the patrons of horticulture (our

employers) to subscribe to a fund which shall be devoted to the preparation of a brochure, or bulletin, gotten up in a style worthy of the cause, and containing handsome reproductions of photographs of flowers, and garden scenery, these views to be accompanied by a brief printed sketch, setting forth the many good points of the vocation of gardening. Much might be made by a clever writer of the perennial pleasure and interest that may be found in sowing of the many seeds, and watching their germination, and subsequent development, of the interesting work of propagation in its many forms, such as cuttings, grafting, budding and so forth. The pleasures, the hopes, yea, and the disappointments of hybridization. The chances of mutations or sports in plants.

Something might even be made of the studies in natural history, and applying the same to the control of insect pests and fungoid diseases. The material side would be, the opportunities of advancement to head gardener, estate, park and cemetery superintendencies, and judging from results, it would appear that the regular gardener's training is one of the best avenues to success in commercial horticulture or floriculture.

This bulletin properly prepared, should be circulated among high-school superintendents and principals with an urgent request that it be brought to the attention of pupils, especially those about to graduate. Directions should be given, that all interested pupils should apply to the Secretary of the National Association of Gardeners, who would always have a list of situations where these pupils may be placed.

The writer believes that the love of plants and flowers, as well as the desire, and ability to cultivate them, is latent in most people, and that it only requires the surroundings, and the opportunity for them to develop this latent ability. This holds equally true of the city boy as it does of the boy brought up in the country. Some such method as here proposed would give many a boy a suggestion at a time when it is most needed, and would possibly be the means of getting some excellent material from the cities, which would otherwise drift to the factory, the mill or the office.

The writer is fully aware of the crudities and imperfections of these suggestions and merely submits them as tentative, in the hope, and almost certain belief that this convention

holds many able men who can, and will suggest some more useful schemes for arousing the interest of the young men toward our profession."

PLANTS UNDER GLASS.

Careful thinning must be done to get good results with sweet peas. Of course sowing the seed thinly is economical, both of seed and labor, but at any rate the plants should stand two or three inches apart in the rows. Perhaps you will prefer to start your plants in flats of sand or loam and transplant them. Many people like to do the work that way. It is better on the whole to use solid beds for the sweet peas than to grow them on benches. They can make a deeper root growth, of course, and longer stems. Well decayed cow manure is perhaps the best fertilizer for sweet peas under glass, and it should be well worked into the beds.

It doesn't pay to be in too much of a hurry to lift the field grown hydrangeas, for then the wood will not be sufficiently mature. After you pot them up give them a good watering and keep them out of doors until frosts threaten. You can keep hydrangeas over winter in any good cellar which is cool but not cold enough for freezing. If you look at them every two or three weeks you can prevent their becoming dust dry and have them in good condition when spring comes.

MASTER BRAND CONCENTRATED MANURE!

Greenhouse and Garden Fertilizers. Write us for detailed information and prices on

**High Grade Concentrated
Sheep Manure**

and our

Vine and Plant Manures

PROTO FEED & GRAIN CO.

4121 S. La Salle St.

CHICAGO

SEEDSMEN'S WEEK AT GRASS LAKE.

Grass Lake Seed Farms were the mecca for the seedsmen of the U. S. and Canada Sept. 2nd to 5th. Here are the trial grounds and seed raising farms of the Jerome B. Rice Company, occupying one of the finest districts for this purpose in the state of Michigan. They went at the invitation and as the guests of the Company (as announced in our issue of August 30th) and spent a most pleasant and profitable time, making notes and listening and discussing the points of the thousand and one things to be seen there growing and at their best stages of development. The visitors were taken over the grounds in automobiles, stopping whenever there appeared something special to see, and that was very frequently. Cucumbers, melons, onions, squashes, tomatoes, turnips, carrots, beets, beans, radishes and many other subjects are produced here in perfection, and there were no dull minutes either in the fields or trial grounds; and the discussions did not stop there, but were carried into the small hours of the morning when the visitors foregathered over their pipe and their glass at the offices of the company. Among those present were:

F. S. Ingersoll, Rocky River, Ohio; Wesley D. Simon, Philadelphia, Pa.; David and Lee Don, New York, N. Y.; Chas. W. Bolgiano, Washington, D. C.; Hugh Milloy (Geo. Keith & Sons), Toronto; Allen C. Drake (Chas. McCullough Seed Co.), Cincinnati, Ohio; A. J. Crockett and G. F. Bradley (Templin, Crockett & Bradley Co.), Cleveland, Ohio; W. A. Hall (Hall Seed Co.), Louisville, Ky.; C. H. Sears and Capt. J. Ward Nelson (Sears & Nichols Co.), Chillicothe, Ohio; S. F. Leonard, Chicago, Ill.; S. A. Wilson (Olds Seed Co.), Madison, Wis.; Merton L. Bamer and H. L. Shoemaker (Page Phillips Seed Co.), Toledo; C. Herbert Anderson (Frank S. Platt Seed Co.), New Haven, Conn.; S. F. Willard (Comstock Ferre & Co., Wethersfield, Conn.; Wm. Rennie & Co., Toronto, Ont.; Harry Livingston (Livingston Seed Co.), Columbus, Ohio; Harry L. Holmes, Jr. (Holmes Leatherman Co.), Canton, Ohio.

The Company was represented on this occasion by George E. Starr, the superintendent of the farms, ably assisted by Howard M. Earl, Charles P. Guelf, Albert Kenerson, Harry H. Hedges and G. L. Schiedler. The event was altogether a most enjoyable one, and everybody departed with the

ardent thought in their minds that the Jerome B. Rice folks were great people and deserved well of their country and the seedsmen of the world, and wishing them every success in their enterprise, and thanking them for the courtesy which dominated the firm in issuing the invitation.

NEW PRESIDENT OF THE GLADIOLUS SOCIETY.

Many people not personally acquainted with H. E. Meader, of Dover, N. H., the newly elected president of the American Gladiolus Society, will be interested to know just how he looks. The accompanying picture is a very good one, and reveals the fact that he is a very good looking man. The picture, however, fails to properly indicate the energy and enterprise which have helped to win for Mr. Meader the success which he has achieved.

Mr. Meader is thirty-nine years of



Mr. H. E. Meader

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French bulbs. Splendid quality. First shipments now here. Send your order at once. They are going fast. XX, \$21.00; XXX, \$24.00 per 1000.

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age, and has been a grower of gladioli exclusively for over ten years. He was a charter member of the American Gladiolus Society, and is also a member of the Massachusetts Horticultural Society. He has served as judge at various flower shows in New York State and elsewhere, and is considered an authority on the gladiolus, as he may well be.

He has come before the public recently because of his purchase from Mr. Kunderd of the gladiolus Lily White, thus acquiring the most valuable stock of any one variety ever sold in America. This is a variety which is likely to become very popular as a florist's flower.

Mr. Meader was in attendance at the Detroit Convention, where the honor of being made president of the society was conferred upon him.

COMING MEETINGS AND EXHIBITIONS.

Detroit, Mich.—Vegetable Growers' Ass'n of America, annual convention, Detroit, Mich., Sept. 9 to 13. Sec'y, Sam. W. Severance, Louisville, Ky.

New Haven, Conn.—New Haven County Hort. Society, annual fall show, Sept. 30 and Oct. 1.

New York City.—The American Institute and the American Dahlia Society, exhibition of dahlias in the Engineering Bldg., 25-33 West 39th St., Sept. 23 to 25. Sec'y, William A. Eagleson, 322-24 West 23rd St.

New York City.—The American Institute and the Chrysanthemum Society of America, exhibition of chrysanthemums in the Engineering Bldg., 25-33 West 39th St., Nov. 5 to 7. Sec'y, William A. Eagleson, 322-24 West 23rd St.

Providence, R. I.—Rhode Island Hort. Society, flower show, Sept. 13 and 19; chrysanthemum show, Nov. 13 and 14. Sec'y, Ernest K. Thomas, Kingston, R. I.

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It is a matter of regret that the importation of Roman hyacinth bulbs has been held up by French inspectors. Quite obviously these inspectors could take no other action when they considered the nature of the plant quarantine imposed by the Federal Horticultural Board of this country. And of course this board passes the buck to the French inspectors, so that American importers have no loophole offered them through which Roman hyacinths can come in. So far as appears, the fungus troubles which have been found to affect the hyacinth bulbs are practically innocuous. It is stated that they are not transmitted from one bulb to another and do but little damage. This slimy fungus has appeared on Roman hyacinth bulbs for many years but has not been regarded as anything to worry about. It is possible, but not probable, that something wholly new has been discovered by the French inspectors. As the matter stands, however, gardeners and others who have depended upon hyacinths for forcing must return to other plants. There is likely to be a fairly good supply of tulips of the more common sorts, the rarer varieties being largely omitted from importers' lists. English buyers are decidedly aggrieved at what they call a rather underhanded action of French bulb growers. It is charged that these growers represented at the first of the season that bulbs were very scarce because of short crops, with the result that prices were boosted to unheard of elevations. Then later these growers made abundant offerings. It is also claimed that they have sold freely to retailers, to the detriment of wholesale houses and importers. Unquestionably echoes of this controversy will be heard in the American trade.

There seems to be no lack of Paper-whites and the Chinese narcissi. It is expected that there will be a big sale of these bulbs this year and that the demand among amateurs will be strong, owing to the scarcity and high price of other plants. The Paper-white is a bulb

which can be safely exploited to a greater extent than in the past. It seems to be the unanimous statement of importers and buyers that Japanese bulbs are very hard to secure in great numbers and that prices will be high. It is a question, indeed, whether lily prices will not be almost prohibitive. Many of the dealers are already saying that they cannot hope to sell lilies at an extravagantly high price and will not try. Lilies are used largely for church purposes and something else can be substituted.

Some Formosums are coming in and other shipments are expected soon. It is understood that the quality is nothing to brag of. Bermuda lilies are here, and while the supply is not large, the quality seems to be excellent. Indications are that a great many callas will be grown this season. The yellow Elliottiana is growing in favor and seems likely to become a popular florists' plant. This lily makes a very good cut flower and has less of the funereal suggestion than the white calla. The Regal lily will be forced to some extent. The possibilities of this lily are not yet realized. It will make a good Easter flower and when forcing can be started early, flowers can be had at Christmas. This lily will sell well as a potted plant, and the demand for cut blossoms will grow as it becomes better known. The stock in this country is constantly being increased and doubtless will soon be offered at so low a price that the bulb can be made free use of. There will be plenty of gladioli for forcing, and as freesias are in fair supply, bulbous stock will not be lacking all through the season.

Botanic garden's future

It is almost too much to expect that the bill introduced by Senator Moses of New Hampshire, providing for the extension and beautification of the National Botanic Garden at Washington, will be acted upon very soon. What with the treaty, the high cost of living, labor difficulties, and a host of other pressing matters, Congress is not likely to have much time in the near future to devote to aesthetic matters, however meritorious they may be. Nevertheless, the time is certainly coming when Congress will take some action looking to the improvement of this garden. The fact is that many congressmen have long felt that the garden was not a thing to be very proud of in its present condition. There is every reason to believe, therefore, that when action is taken it will be favorable to a general improvement scheme which shall include taking in additional park areas and other land west and south of the present site. There is plenty of such land available and when it is united with the Botanic Garden, there will be ample opportunity for laying out an institution which shall be a credit to the national capital and excite the admiration of the thousands of visitors who will necessarily see it. Horticulturists and florists the country over have long recognized the desirability of making the changes under discussion and it is a pleasure to learn that members of Congress are at last taking the same viewpoint. The New Hampshire senator is to be congratulated upon his initiative and good judgment.

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GREEN FOR USE WITH CUT FLOWERS.

Mr. H. E. Meader of Dover, N. H., the new president of the American Gladiolus Society, has an interesting article on "Green for Use with Cut Flowers" in "The Flower Grower" for August. In part the article reads as follows:

Perhaps the most durable yet pleasing green of easy access to most every one is the foliage of the edible asparagus

After the tender shoots are cut this plant sends up a wealth of feathery plumes, which, if sufficiently matured, will endure and look well for a long period with cut flowers.

A very pretty green is the foliage of the cosmos, early or late varieties, the late flowering variety usually making a stronger growth, producing more leafage. However, in the earlier varieties, the flowers are an additional attraction as they will open from buds that are cut quite immature. Cosmos foliage is of a lace-like character, colored a beautiful grass-green and small sprigs may be cut from the stalks without taking the entire branch.

A dish of pansies or other short-stemmed flowers, or tips of Gladiolus spikes bloomed out to the end, arranged with short sprigs of cosmos is most attractive.

There are many grasses of easy cultivation, including several native sorts, which will go far to enhance the beauty of flowers in a vase or basket.

The quaking grass (*Briza Maxima*) throws up many wiry stems, with tiny seed heads like miniature flattened pine cones, which are delicately poised on slender filaments and quiver at the slightest motion. When dry these turn to a silvery straw color.

Cloud grass (*Agrostis Nebulosa*) has a very fine dainty appearance; a bed giving a soft misty effect that is extremely airy and graceful. These are

both annuals producing freely the first year.

Many of the perennial grasses are magnificent, though requiring the second year to mature, they well reward the extra patience needed to grow them.

Among these, Pampas grass (*Pennisetum Longistylum*) and its showy relative (*P. Rueppelianum*) the purple fountain grass will form clumps from two to three feet in height and produce long graceful plumes of greenish-white and purplish color.

There are many other sorts which are mostly very easy of culture. I have planted some dozen varieties and find all interesting.

Thalictrum Adiantifolium, herbaceous perennial, has finely cut leaves, very similar to maidenhair fern and is of a pleasing deep green color.

The panicles of small whitish flowers appear in June and July and are quite attractive.

Useful Flowering Plants

A most useful plant is the annual *Gypsophila* or Baby's Breath. The flowers are produced in great profusion and are so quickly grown into maturity that several sowings should be made during the season, to assure a continued supply. There is a pink form of the above that is highly recommended.

Artemesia Lactiflora, perennial, is of unquestioned value. The creamy-white spirea-like flowers are loosely arranged on long stems three to four feet high, and are light, graceful and delightfully scented.

They are admirable with Gladioli or Dahlias and are in season with these flowers.

The summer Lilac (*Buddleia Magnifica*) sometimes called Butterfly Bush is a persistent bloomer, continuing from July until frost. Its long

spikes of rosy mauve flowers go particularly well with light shades of Gladioli.

Golden-rod and the native wild aster or frost-flower are used in great quantities by city florists, and they are beautiful with other larger flowers.

Some very effective arrangements can be made with the deep green of hemlock, which is especially good as a background for bright colored Gladioli

SKETCH OF ADOLPHUS GUDE.

The Washington Herald under the title of "Who's Who in our City," has a very appreciative sketch of Adolphus Gude. It reads in part as follows:

"Mr. Gude is one of Washington's foremost florists and also one of the most successful growers of high-class flowers in this country, along with his brother and partner, William F. Gude.

"Born in Knoxville, Tennessee, some fifty-six years ago, he started to cultivate flowers in his own garden and when he later went to Prince Georges County, Md., he began commercializing his "hobby," and worked for a local florist while attending the Spencian Business College in Washington from which he graduated in the late '80's."

"Mr. Gude then started into business with his brother on Thirteenth street where they have been located for the past thirty years. Mr. Gude married a Washington girl, Miss Mary E. Knoll, and has five children, three of whom served with the colors during the war.

"Mr. Gude is a director of the Anacostia bank, a member of the Board of Trade, Chamber of Commerce and of many fraternal organizations, including the Masonic Lodge."

Here is an instance where a prophet is not without honor, even in his own country.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

At the Bayard Thayer estate in Lancaster not long ago I saw the most remarkable specimen of the beautiful and sweet scented *Lonicera syringantha* which has ever come to my notice. Truth to tell, this is not a very widely planted shrub, although it is by no means new, having been known in this country, for many years. Possibly it is not very easy to propagate. At any rate it has never been widely distributed, but it is a most worthwhile plant, with masses of tiny flowers in the spring, flowers that fill the air with their delicious, syringa like fragrance.

I am wandering, however, from what I started to say. As a rule, this honeysuckle makes an upright growth, but the specimen at the Thayer place has developed a creeping or procumbent habit, spreading out over a surprising large area. Mr. William Anderson, the superintendent, paced off thirty feet while I was looking at the plant, that marking the limits in one direction.

Mr. Anderson said that originally three plants were set out close together. They came from the same place and were supposed to be all alike. Two of them kept to the normal form, but when the third began to show its usual character, the others were removed, so that this creeping honeysuckle now has the whole spot to itself.

One of the most interesting features of the grounds around the house on the Thayer estate is the hedge of *Taxus cuspadata*. One occasionally sees this plant recommended for hedge purposes, but I know of no other

garden or estate where it has been used, except possibly in a very small way. Its merits are most obvious. It makes a strong, bushy growth. It is practically impregnable, and it has a grace and charm such as few hedge plants present. This *Taxus* is surely an aristocrat, at least in appearance, and far more ornamental than most of the shrubs used even on pretentious and costly places. The plants in the Thayer garden are about ten years old, and a little higher than a man's head, possibly seven feet. They were set out in a row, two feet apart, and have been beautiful, I am told, at all stages of their growth. They are trimmed only once a year, in April, and the soft, almost fluffy nature of the new growth adds wonderfully to the charm of the hedge. Keeping it trimmed hard would be to sacrifice one of its most delightful features. I think it is safe to predict that in future years there will be a wide planting of this *Taxus* for hedge purposes. It will be an expensive undertaking in most cases, for *Taxus cuspadata* is not likely to become a cheap shrub at any time, but those who can afford it will have a hedge worth all that it costs.

No matter how careful the setting of the lagoons in a public park or a pond in private places, something is lacking unless there is life in or on the water. On many estates it is common to find ducks and other aquatic birds, but swans are comparatively rare. Yet there is no bird which does so much to complete a picture. Mr. Thomas W. Head, who is in charge of the Melody Farm, one of the finest estates at Lake Forest, Illinois, has

been successful in raising seven of these beautiful creatures and takes great pride in them. The accompanying illustration, while only a snap shot, shows Mr. Head's pets swimming about in a pond on the farm. His "water nymphs" attract no little attention from visitors. Mr. Head went to Lake Forest several years ago from Boston, and I am sure that his eastern friends will be glad to learn of what he has accomplished in this for him rather unusual line of work.

Gardeners and flower growers of New England will find much satisfaction in the announcement that the Trustees of the Massachusetts Horticultural Society have voted to accept the offer made by Miss M. R. Case, of Weston, of one thousand dollars to be used for additional exhibitions during the coming year.

The interest which Miss Case has taken in the Horticultural Society might well be emulated by other people who are concerned with horticultural advancement. As a result of what she has done there will be four shows in 1920 in addition to the six which had already been planned for, including the big orchid show in the spring. About \$8,500, will be available for premiums. A great amount of opposition had developed to the proposal that the number of shows be cut down and the interest which has been shown this season in such exhibitions as appeal particularly to the amateur has shown that it is still possible to keep up the standard of these exhibitions.

Undoubtedly there are many ways in which progress and advancement can be expressed. I know, for my part, that Miss Case has a number of excellent ideas, some of which have already been put into print. There are other women interested in gardening who also have projects which, if carried out, will go far towards making the coming flower shows different in character and of much greater value to all concerned than those of the past. Certainly there is much reason for encouragement in the present outlook.

LORRAINE BEGONIAS.

With the cooler nights the Lorraine begonias will make rapid growth. By the end of the month in many sections a little artificial heat will be needed at night. A fairly warm house is best for these begonias until they begin to show color, after which cooler quarters are better for them, although it is imperative that there be plenty of good ventilation. A close, moist house will cause the foliage to spot. If aphids show up, and they probably will, fumigate lightly, but frequently.



Some of Mr Head's Swans

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PLANTS FOR PRIVATE GREEN-HOUSES.

Of the *Nerines* *N. Fothergillii* has the finest color, but all are most useful autumn bulbs, and last a long time in water, says a writer in the *Journal of the International Flower Club*. They are easily managed, and like many cape bulbs, flower before the leaves are produced. During the growing of the leaves they must be carefully attended to and watered; and even now and then, a small dose of liquid manure does them good. They are best not re-potted, except very rarely; and as the leaves die down they must be laid on their sides, and dried and well baked in the sun, just like the *Freezias*, only not shaken out and re-potted, as recommended for them. The bulbs, too, should be planted, like *Vallotas* or *Hyacinths*, well on the top of the pot. I never can understand why these very ornamental bulbs are not grown in larger quantities, especially as they increase and improve, instead of being almost useless, as is the case with the spring bulbs after forcing.

A Cape family of small, very sweet-smelling shrubs called *Diosma* (see *Johnson's Gardener's Dictionary*) are well worth growing, in fact no green-

house ought to be without some of them. Their charm is principally in their foliage and scent, as the flowers are insignificant. They are easily increased by cuttings in spring under a bell-glass. The growing of Cape plants is always interesting. Small Cape *Aloes* have charming pink flowers in the spring, which last long in water, not unlike the *Lachenalias* (see catalogues), all of which are worth growing.

Leontis leonurus did not flower out of doors with me last year at all, either in large pots or planted out in a bed. The plants were covered with buds, and so we lifted them at the end of September and put them into heat, where they flowered well. This should be worth while for anyone with plenty of room, as it is such a handsome flower when picked. Like the *Daturas*, they may be extra late from the excessive dryness of May and June, and wet afterwards. It is a Cape plant; there it forms large bushes covered with bloom

STAMFORD HORTICULTURAL SOCIETY.

The regular monthly meeting of the Stamford Horticultural Society took place Friday night, Sept. 5th. Four

members were nominated. The exhibits of flowers, fruits and vegetables excelled all the previous ones. The display of *Dahlias* was specially fine. Following were the awards given by the judges: Collection of *Dahlias*, by A. Carver, Cultural Certificate; Coll. *Dahlias*, by Quality Seed Store, highly commended; Seedling *Dahlias*, by M. J. Quirk, highly commended; Coll. *Dahlias*, by S. Whitehouse, Cultural Certificate; Coll. *Dahlias*, by Alex. Geddes, Certificate of Merit; Coll. of *Dahlias*, by Thos. Sadliez, Cultural Certificate; Marsh Mallows, by Wm. Whitton, Cultural Certificate; Vase of *Pennisetum*, by Jas. Porter, highly commended; Vase of *Buddleia* *Vauchlin*, by Alex. Geddes, vote of thanks; Vase of *Gladioli Primilum Hybrid*, by Andrew Whitelaw, highly commended; Vase of *Tritoma Pfitreri*, by A. Brieschke, highly commended; Hanging Basket of *Begonias*, by A. Whitehouse, highly commended; Specimen *Verbena*, by A. Whitehouse, very highly commended; Exhibits of fruits, by A. Cant, highly commended; Sweet Potatoes, by same, hon. mention; Basket of Peaches, by J. H. Wallace, highly commended; Cucumber Suttons Telegraph, by Alex. Geddes, highly commended.

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VALUE OF FALL SPRAYING.

There is an increasing opinion and a recognized tendency among commercial fruit growers, that it pays to spray their orchards in the fall after the crops have been harvested.

The reasons advanced are, that the San Jose and other scale insects, eggs of rosey aphid and similar plant lice and hang over parasitic fungus spores, such as cause brown rot of the peach, plum and cherry, as well as the apple scab and smut fungus of grapes are easier controlled in the fall when young and tender than early in the spring when their natural winter protection is harder to destroy, and if the fungus spores are destroyed on the foliage before it falls to the ground there is less chance of it becoming inoculated with the soil near the trees, vines or bushes and reproducing themselves thousands of times the following season, and their shrewd commercial growers figure that it is reasonable to assume that dead insects and fungus are not irritating the trees and absorbing the vital and valuable plant juices during the winter if they are destroyed in the fall. So, if the commercial fruit grower finds it profitable to rid his trees and plants of various insect and fungus pests in the fall it behooves the amateur to follow suit if he wishes to have healthier trees and plants and better fruit.

CHARLES FREMD.

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Cleveland, O.—Knoles Bros., 1834 W. 25th
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Cleveland, O.—The Smith & Feters Co.,
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Fall River, Mass.—Warburton, 495 New
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New Bedford, Mass.—Murray the Florist,
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and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
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Toronto, Can.—J. H. Dunlop, 8-10 West
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Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—Randall's Flower Shop,
22 Pearl St.

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Practical instruction is offered in
vegetable, flower and fruit gardening,
greenhouse and nursery practice, to-
gether with lectures, laboratory, field
and shop work in garden botany, soe-
logy, pathology, landscape design, soils,
plant chemistry and related subjects.

The curriculum is planned for the
education of any persons who would
become trained gardeners or fitted to
be superintendents of estates or parks.
Students may be admitted at any time.
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The New York Botanical Garden

Brux Park NEW YORK CITY

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SONS**

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High Grade Cut Blooms**

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the F. T. D. must be accompanied by
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and all Seasonable Varieties of Cut Flowers

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Manufactured by

W. J. COWEE, Berlin, N. Y.

10,000...\$0.25 50,000...\$0.75 Sample free.
For sale by dealers.

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AND ALL OTHER SEASONABLE STOCK

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From Henry M. Robinson & Co.**

For Safety Place Your Orders With Us

HENRY M. ROBINSON & CO.
2 Winthrop Square and 32 Otis Street, BOSTON, MASS.

COMMERCIAL FERTILIZERS FOR FLORISTS.

At the recent Convention of the Florists Society of Iowa, Mr. Geo. L. Kurtzwell, secretary of the Iowa Seed Co., read an interesting paper on "Commercial Fertilizers which are of Most Value to Florists." The paper was as follows:

As long as natural manures were abundant and fresh soil of good quality was easily obtained the florist paid little attention to fertilizers. Occasionally a grower would use some prepared fertilizer for a special purpose but in most cases these were packing-house by-products or some other form of "organic" fertilizer.

The ones most commonly used were bone meal, sheep manure, and dried blood. Naturally these are best known and are the ones to which the grower turns when his supply of natural manures is not sufficient for his needs. Especially in the large cities increasing quantities of prepared manures are being used by the florists.

That there is a great deal of mystery attached to the use of commercial fertilizers under glass is evidenced by the fact that smooth salesmen can talk the grower into purchasing worthless mixtures which are supposed to correct all errors from fungus to crop failure. We bought such a "mixture" some years ago which, if our memory does not fail us, was supposed to correct acidity and counteract alkali. It was not a fertilizer but a "tonic" that would put life and "pep" into the deadest soil and stock. In practice it was disappointing and for very good reasons. Analysis showed that it contained white sand and iron filings.

The State University of Illinois has carried on experiments in the grow-

ing of both Roses and Carnations with the use of commercial fertilizers and have arrived at the conclusion that they can be grown just as good as with the use of manure. They have also taken a great deal of the mystery out of the process. Bulletins covering these experiments have been published and can no doubt be obtained by writing the Agricultural Experiment Station, Department of Horticulture, Urbana, Ill.

The Iowa Florist is more fortunate than some of the eastern brethren and does not need to worry much about plant food supply but should it ever be necessary to purchase this item he will know the possibilities as well as the dangers to be guarded against.

Quoting from one of the bulletins.

"Fertilizers were applied as follows:

Manure at the rate of 125 lbs. per 100 sq. feet.

Dried blood, 8 lbs. per 100 sq. feet.

Acid phosphate, 2 lbs. per 100 sq. feet.

Potassium sulphate, 2 lbs. per 100 sq. feet."

A nominal amount of manure must be added to supply the necessary humus.

The three elements which are not found in the soil in sufficient quantity are nitrogen, phosphorus, and potassium.

The nitrogen is supplied by the dried blood though ammonium sulphate could be used, but it was found to dry the soil more quickly. Phosphorus is supplied by the acid phosphate. The potassium is supplied by the potassium sulfate.

While some manure must be used yet one-fourth to one-third the usual quantity is sufficient where the commercial fertilizer is used.

H. E. FROMENT
Wholesale Commission Florist
Choice Cut Flowers
New Address, 148 West 26th St., NEW YORK
Telephones: 2200, 2201, Madison Square.

WM. P. FORD
Wholesale Florist
107 W. 28th Street, NEW YORK
Telephone 5335, Farragut.
Call and inspect the Best Establishment
in the Wholesale Flower District.

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Wholesale Commission Dealer in
CHOICE CUT FLOWERS
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Telephones—1631-1632 Madison Square

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Wholesale Commission Florists
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E. G. HILL CO.
Wholesale Florists
RIEHOOND, IND.

Please mention Horticulture when writing.

REED & KELLER
122 West 25th St., New York
Florists' Supplies
We manufacture all our
Metal Designs, Baskets, Wire Work & Novelties
and are dealers in
Decorative Glassware, Growers and
Florists' Requisites

THE KERVAN CO
Fresh Cut Decorative Evergreens.
Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
Catalog of Greens and Florists' Supplies
119 W. 28th St., - NEW YORK

WILLIAM H. KUEBLER
Brooklyn's Foremost and Best
WHOLESALE COMMISSION HOUSE
A First Class Market for CUT FLOWERS
Willoughby St., Brooklyn, N. Y.

WE WANT MORE SHIPPERS
We have a numerous clientele of New
York City buyers and the demand exceeds
our supply. This is especially true of
Roses. We have every facility and abun-
dant means and best returns are assured
for stock consigned to us.

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Hardy Cut Evergreens, Cut Flowers and Florists Supplies
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276 Devonshire Street, BOSTON, MASS.
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Hardy Fancy Fern Our Specialty
264 RANDOLPH ST., DETROIT, MICH.

The House for Quality and Service
ZECH & MANN
We are Wholesale Florists Doing
a Strictly Wholesale Business
30 East Randolph Street, CHICAGO

The commercial fertilizers must be
carefully applied so even distribution
and thorough incorporation is secured.

After the fertilizer is mixed with
the soil it should stand a day or two
before planting to avoid injury to the
roots. Over feeding or careless appli-
cation is much more serious than with
natural manures and it would not be
advisable to experiment on a large
scale unless competent and careful
growers were in direct supervision.

Iowa as a state knows very little
about commercial fertilizers but may
we not learn by observing the experi-
ments of others who are compelled to
use them, and may we have the good
sense to use them before we have lost
any considerable profit we might have
gained by their use.

THE GOLDEN GLORY OF OUR FALL FLOWERS.

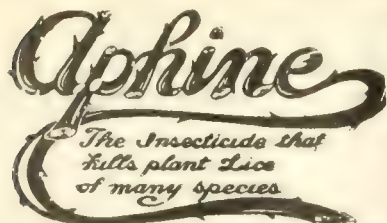
Before the purple asters bring the
thoughts of Ralph Waldo Emerson to
us, how golden is the glory of our
midsummer flora, tansy, goldenrod,
jewel weed, tall primroses, butter and
eggs, with here and there the fall
dandelions brightening up the fields.
A symphony in yellow, with just
enough of the beautiful crimson Joe-

Pye weed to add another note. A walk
through the fields of New England
gathering the flowers would bring us
home with yellow blossoms in our
hands. Not so in Wales. I remember
returning home from a walk there in
late July or August with my hands
full of purple blooms, harebells,
heather and flowers whose names I
do not now remember, but their
shades were mauves and blues.
Heather we grow at Hillcrest, a great
glowing patch of it near our blue-
berry bed, and as a border to our ave-
nue. We wanted something low grow-
ing, but a little stiff and formal on the
opposite side of the avenue from our
row of red cedar trees. We could not
plant the cedars there as they would
come in front of our espalier and
shade too much the fruit trees. We
tried the heather and it has been most
beautiful, blooming in August before
the fall flowers come. We protect it
with leaves in winter and have one
white bunch blooming among the
crimson.

How beautiful are the wayside flow-
ers, the children's flowers, which have
been given so directly by God to man.

M. R. CASE.

Hillcrest Farm, Weston.



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.
Quart, \$1.00; Gallon, \$2.50.

FUNGINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.
Quart, \$1.00; Gallon, \$2.50.

VERMINE

For eel worms, angle worms and other worms working in the soil.
Quart, \$1.00; Gallon, \$2.50.
SOLD BY DEALERS.

Aphine Manufacturing Co.
MADISON, N. J.



Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to direction, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

1/2 Pint, 20c.; Pint, 50c.; Quart, 90c.; 1/2 Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00.
Directions on package.

LEMON OIL COMPANY

Dept. S. 420 W. Lexington St., Baltimore, Md.



Pulverized or Shredded
Cattle Manure

Pulverized

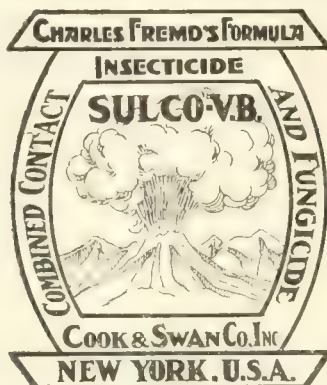
Sheep Manure

The Florist's Standard of uniform high quality for over ten years. Specify: **WIZARD BRAND** in your Supply House Order, or write us direct for prices and freight rates.

THE PULVERIZED MANURE CO.
34 Union Stock Yard, Chicago

A Message to Dealers and Users of Insecticides and Fungicides

The registered TRADE MARK shown here will appear on every package of



SULCO-V.B.

excepting in SOUTH AMERICA, where the registered trade-mark of The Southern Cross Products Co. will appear, but where the registered trade name of Sulco-V.B. will be retained.

When ordering Contact Insecticides and Fungicides, specify Sulco-V.B. It's simple. It's sure. It's safe. It's right in principle. It's right in price. Of your dealer or direct Go to your dealer first.

BOOKLET FREE.

Address **COOK & SWAN CO. Inc.**

BOSTON OFFICE:

141 Milk St.

GEO. H. FRAZIER, Mgr.

Sulco Dept. H.

NEW YORK OFFICE:

148 Front St.

DREER'S "Riverton Special" Plant Tubs



No.	Diam.	Ea.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton Tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER, Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.



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PECKY CYPRESS STOCK

HOT BED SASH

Ask for Circular D and Prices

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NEW YORK



World's Oldest and Largest
Manufacturers of

FLOWER POTS

WHY?

A. H. HEWS & CO., INC.

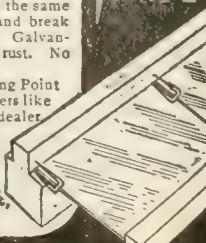
Cambridge, Mass.

Dreer's Peerless Glazing Points For Greenhouses

Drive easy and true, because both bevels are on the same side. Can't twist and break the glass in driving. Galvanized and will not rust. No rights or lefts. The Peerless Glazing Point is patented. No others like it. Order from your dealer or direct from us.

1000, W.C. postpaid.
Samples free.
HENRY A. DREER,
714 Chestnut Street,
Philadelphia.

FULL
SIZE
No. 2



NEWS AND COMMENT

PHILADELPHIA.

George A. Strohlein, general manager of the Dreer Nurseries at Riverton, reports the season's business so far as unusually good. The month of August with them has broken all records for shipments, and they have more orders than usual booked for fall delivery. Among the latter are a great many retail orders for perennials, showing that people are more interested in their gardens again. Many visitors, both private and professional, have visited Riverton recently and every one has had a cheerful outlook on the future. The prospects seem rosy all along the line.

As is well known, the Riverton establishment is famous for its collection of cannas—which is perhaps the largest and most up-to-date in the country, and these are at their best just now and will well repay a visit. The same may be said of the fields of perennial phlox. And bye and bye (say about Sept. 25th) the dahlias will be at their best, and everyone knows that the Dreer collection is of the widest extent and contains only the cream. The “has beens” are every season religiously relegated to the ash pile—and that means a lot to the buyer who wants the very best rather than a whole lot of “no good” for little money.

John D. Eisele, president of the Dreer Company, accompanied by Mrs. Eisele, has been enjoying a well earned vacation the past month or more, his travels having taken in a wide stretch and extended as far as the Pacific coast. Advices received from him dated San Francisco, Sept. 2nd, indicate that both he and Mrs. Eisele are in good health and enjoying their trip immensely. Mr. Eisele is very much impressed with the country wide development horticulturally during the past decade and we look forward to hearing many interesting details and opinions from him on his return.

The Robert Scott & Son place at Sharon Hill is well worth a visit at

present. Many are wending their way there to see the new Scott seedling rose *Cornelia*, which is now in full bloom. One big house of it is in splendid shape and is worth going a long way to see. *Cornelia* is a cross between Mrs. Aaron Ward and *Ophelia* and shows great superiority in many ways over both parents. In color it is a light flesh pink with a dark rose center; large and full in form and almost as perfect as *Jardine* when at its zenith. In foliage and stem it is a light green. It is very prolific, producing three times as many flowers to the plant as *Jardine*. Looks like a sure winner. A number of other new roses of interest are worthy of notice and we will report on them later.

CHICAGO.

A. Miller, president of the American Bulb Co., who sailed for Japan last May to purchase lily bulbs and other stock for his company, writes that it is very difficult to find lilies in any large quantities. Mr. Miller is expected home in October. Mr. Langhout representing the American Bulb Co., has just returned from the Pacific coast.

The North Shore Horticultural Society of Lake Forest, Ill., meets on the first Friday of each month. The coming annual chrysanthemum show is now the important topic of the day. The many large estates of Lake Forest are in charge of some of the most progressive private gardeners of this country and their exhibition receives high commendation.

Gust Alles was again disappointed in not having his son Nickolas J. honorably discharged from the navy. It looked as if that desire was about to come true, but when his boat touched New York three weeks ago, the car strikes and later disturbing conditions caused the further retention of the sailors. Another son, John M., is back from the army, and fortunately as well as when he went in.

In the death of Andrew McAdams Chicago loses another of its pioneer florists. Mr. McAdams came from the place of his birth, Londonderry, Ireland, when eighteen years old, to Chicago, where he made his home until five years ago, when he sold his retail business on 53rd street to his former employe, Wm. La Grotta, and went to Melbourne, Fla., hoping that he and Mrs. McAdams would both be bene-

fited by the change. Mrs. McAdams passed away three years ago. For some time Mr. McAdams has been in St. Luke's Hospital and underwent an operation, Aug. 11. He leaves one daughter, May, who is well known as a successful landscape gardener. The funeral was held Friday and many floral tokens of esteem were sent by old friends in the trade.

\$10,000 AWAITS MISSING BOY.

There are many florists and growers who were friends or acquaintances of the late W. J. Stevenson, mentioned in the following news item from the New York Press:

There is \$10,000 being held in trust for “Billy” or William Beresford Stevenson, the nine-year-old son of the late William J. Stevenson of Savannah, Ga.

The executors are trying to locate “Billy” to settle up the estate, but detectives in all the large cities from Maine to California have been trying without success to locate the boy, who disappeared two years ago with his mother, Mrs. Jean Stevenson, from the southern city.

Before his death Mr. Stevenson spent a small fortune hunting for the mother and boy, but without success.

Mr. Stevenson was engaged in the florist business. His will, among other things, provided \$10,000 for the boy, who was the idol of his father. The money is in two banks.

The missing woman may be selling books under the name of Mrs. Walter Le Roy or Mrs. Katherine Cooley, which was her maiden name. She is 36 years old and has blond hair and dark eyes.

DAHLIA SHOW AT NEWPORT.

The Newport, Rhode Island, Horticultural Society staged their annual Dahlia show at Convention Hall in a downpour of rain September 3 and 4, but the next day was pleasant which was very pleasing as they finished the show with a ball. There were some very fine exhibits, including strong colored crotons and other greenhouse plants.

Mr. C. Bugholt, gardener for Miss F. Foster, had a collection of very fine gladioli seedlings. A. J. Fish of New Bedford was awarded a silver medal for a collection of 50 dahlias, and received two first prizes in other classes.

A. J. Fish of New Bedford received two firsts and Joseph Figuerido won a first class certificate for a vase of pink dahlias, Margaret Saltus.

THE BOILER OF Unequalled Fuel Economy

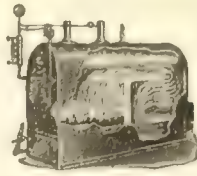
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

HORTICULTURAL SOCIETY OF NEW YORK.

A Dahlia Exhibition will be held on Saturday and Sunday, September 20th and 21st, in the Museum building, New York Botanical Garden. Schedules are now ready for distribution, and will be sent on application to the secretary, George V. Nash, New York Botanical Garden, Bronx Park, New York City. In this connection attention is called to the large collection of Dahlias, located along the west border, just north of the Harlem Railroad plaza, New York Botanical Garden. A space over 400 feet long and 12 feet wide is devoted to this collection, which comprises about 360 kinds and something over 600 plants, representing all the types of this increasingly popular flower. A visit to this collection will well repay either the amateur or professional gardener. The plants of each type are grouped together, so a comparative study is readily made.

GEORGE V. NASH, Secy.

BOSTON.

The fruit and vegetable exhibition of the Massachusetts Horticultural Society scheduled for September 11-14 has been postponed to Sept. 25-28. The Dahlia exhibition will be held Saturday and Sunday, Sept. 13 and 14. This change has been made by direction of the Committee on Prizes and Exhibitions and no doubt will result in larger displays. It is expected that the dahlia show will be a big one, as a great many amateurs are showing their interest this year.

Mr. Henry Penn returned last week from his vacation at Belgrade Lakes, Maine. He reports a very pleasant time, although he says the season was not exactly suitable for successful fishing. At the same time he admits modestly that he obtained his share of what fish there were in the lake.

Mr. P. Welch was back at his desk Monday morning after a summer spent at Old Orchard Beach. He seems to be in good shape physically and keen for a winter's business.

The first fall meeting of the Gardeners' & Florists' Club will be held Sept. 16, on which occasion vacation and convention experiences will be in order. Prof. J. G. Jack of the Arnold Arboretum is to give an illustrated lecture on "Flowers and Fruits From Native Trees and Shrubs" at the meeting Oct. 21.

Commencing today the wholesale markets will close at 5 o'clock on Saturdays.

NEW ENGLAND

Much glass in greenhouses was broken by a recent hail storm which swept over the Connecticut Valley.

Alfred H. Knight has sold his florist business on Main street, Shrewsbury, Mass., to William E. Morey, who had been his foreman for eight years. Mr. Morey expects to develop the business to an increasing extent.

The fern dealers of Western Massachusetts have begun putting ferns into cold storage for next winter's trade.

Many changes and improvements are being made at the store of H. F. Littlefield in Worcester. For one thing, a new glass front has been put in, and the lighting system has been changed.

The following corporations have been granted Massachusetts' Charters:

Blue Hill Nurseries, Inc., Braintree; nursery stock; capital, \$45,000; incorporators, Julius Heurlin, Lina Heurlin and Victor H. Huerlin of Braintree.

Hovey & Co., Inc., Boston; raise, cultivate seeds, flowers, etc. Filed Aug. 13, 1919. \$50,000; 500 shares \$100 each. Directors: Edwin L. Cheney, pres.; Frank E. Cheney, 1780 Mass. avenue, Cambridge, treas. and W. J. Munroe.

James Mann, who recently passed away at Ipswich, Mass., was formerly a florist in that town. He had many rare and valuable plants. Mr. Mann was one of the town's oldest residents, having been born in 1829.

Walter Bellville has purchased the H. A. Vickery greenhouse plant in East Chelmsford, Mass., and will use it for growing vegetables.

OBITUARY.

George Arnold.

George Arnold, well known among florists and horticulturists, died at his home in Ensenore, N. Y., Tuesday forenoon, Sept. 2, aged 62 years, after an illness of two weeks. He leaves his wife and one son, Schuyler, the latter having just returned from service overseas. For the past four years Mr. Arnold had been in charge of the estate of Mrs. J. Letchworth at Ensenore, N. Y. He was employed at James Vick's Sons for 12 years, spending most of his time at the trial grounds at Ogden, N. Y. When the Spencer Peas were introduced he became much interested and grew many of the best named varieties. Several years ago he introduced into the market Primula for Superba which he disposed of to H. A. Dreer, Inc. Since then it has become a very popular plant.

Mr. Arnold was fond of asters and had a great deal to do with introducing and improving the different strains. It was through his effort that the upright type of asters was introduced.

COAL BY AUTO TRUCK.

Mr. Norris F. Comley, proprietor of the Terrace Hall Conservatories of Burlington, Mass., has just received a consignment of 500 tons of coal for his greenhouses. Mr. Comley realized the overburdened condition of the railroads, and had his coal carted from Boston by auto trucks. The Thayer-Griffiths Company were the contractors for the hauling, and they delivered about 100 tons a day.

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Free from Bubbles
Uniform in Thickness

PAINTS and PUTTY

Greenhouse White

(Semi-Paste) The
Faint Particular
Florists Prefer

It will pay you to get our estimates.

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Glazing
USE IT NOW
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12 W. BROADWAY
NEW YORK

Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Lasts longer than putty. Easy to apply.

When writing to advertisers kindly
mention **HORTICULTURE**

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Sylvester: How did you make Miss Brown think you were the finest fellow in the world?

Chollie: I sent her nineteen beautiful roses on her twenty-seventh birthday.—Life.

Rather a clever way of paying an indirect compliment, don't you think—even if it was a kind of a white lie. You can say a lot of things with flowers if you take the trouble to think a minute. If she has quit having birthdays don't send her candy—send her nineteen rosebuds.

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Asparagus plumosus seedling: \$1.00 per 100; \$7.50 per 1,000. **ALFRED M. CAMPBELL**, Strafford, Pa.

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C. KEUR & SONS, HILLEGOM, Holland. Bulbs of all descriptions. Write for prices. **NEW YORK BRANCH**, 8-10 Bridge St.

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For the best Up-to-Date Cannas, get new price list. **THE CONARD & JONES CO.**, West Grove, Pa.

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Carnation Plants: Matchless, \$15.00 per 100; Perfection and Alice, \$12.00 per 100. **ALFRED M. CAMPBELL**, Strafford, Pa.

CARNATION STAPLES

Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c.; 3000 for \$1.00 postpaid. **I. L. PILLSBURY**, Galesburg, Ill.

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Celery plants, Easy Blanching; now grown exclusively by 90% of Kalamazoo growers in place of Golden self Blanching. Strong plants, ready for the field; \$2.25 per 1,000, \$6.00 for 3,000. Cash. **BRILL CELERY GARDENS**, Kalamazoo, Mich.

DAHLIAS

Peony Dahlias Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. **JOHN P. ROONEY**, New Bedford, Mass.

New Peony Dahlia—John Wanamaker. Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to **PEACOCK DAHLIA FARMS**, Berlin, N. J.

DELPHINIUM

Delphiniums. All who have seen my Delphiniums pronounce them as fine as ever they have seen. Write for trade list. **WILLIS E. FRYER**, Mantorville, Minn.

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WILLIAM E. HEILSCHER'S WIRE WORKS, 264 Randolph St., Detroit, Mich.

IRIS

Iris Fryer's New Iris. I am offering a number of my new Iris to the trade, and I also have a large stock of the best of the standard varieties at right prices. Write for new descriptive list of my seedlings, and also trade list. **WILLIS E. FRYER**, Mantorville, Minn.

KENTIAS

Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2 1/4-inch pots at \$15 per 100—larger quantities on application. **J. H. FIESSER**, 711-741 Hamilton Ave., North Bergen, N. J.

ORCHIDS

HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laello-Cattleyas our specialty. One trial order solicited.

PANSY PLANTS

Pansy plants, strong and stocky. "Superb Strain," \$4.25 per 1000, \$12.00 per 3000. Cash. These plants and this strain will please you. Ready Sept. 3rd; orders booked now. **BRILL CELERY GARDENS**, Kalamazoo, Mich.

PHLOX

Phlox. I have a large stock of the best of the standard varieties and a number of my new varieties which compare favorably with any of the standard varieties. Write for trade list. **WILLIS E. FRYER**, Mantorville, Minn.

PEONIES

Peonies. The world's greatest collection, 1200 sorts. Send for list. **C. BETSCHER**, Canal Dover, O.

POINSETTIAS

Poinsettias, 3 inch, \$15.00 per 100. 2 1/4 inch, \$12.00 per 100; \$100.00 per 1,000. **ALFRED M. CAMPBELL**, Strafford, Pa.

SPHAGNUM MOSS

Live Sphagnum Moss, orchid peat and orchid baskets always on hand. **LAGER & HURRELL**, Summit, N. J.

VINES

Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. **J. H. TROY**, Mount Hissarlik Nursery, New Rochelle, N. Y.



For everlasting satisfaction in Sash Operating Device use the **ADVANCE**. This machine has a universal reputation as being the strongest and neatest on the market, so why not be among the satisfied customers of **ADVANCE MATERIALS**? Our Catalog contains some very interesting information on how we can operate the sash and also how we can reduce your repair work to a very small item.

Write to us today for our latest catalog.

ADVANCE CO., Richmond, Ind.

**Advertise your wants
in Horticulture**

THE ELM CITY NURSERY COMPANY, Woodmont Nurseries, Inc., New Haven, Conn.

IBOLIUM

THE NEW HARDY HYBRID PRIVET

Resembles California Privet in Habit with this added advantage:

It's as **HARDY** as **IBOTA** Privet and will succeed wherever **IBOTA** thrives.

Name, **IBOLIUM**, coined thus: **IBO** from **Ibota** and **LIUM** from **Ovalifolium**.

REGISTRATION

Society of American Florists
April 5th, 1919

IBOLIUM Privet is the product of crossing the California Privet (See parent) with **Ibota**, the hardy Chinese Privet.

It is similar in general character to California Privet being perhaps somewhat more robust in habit of growth. It is inclined to bush more freely from the base than California Privet, a decided advantage.

It can be propagated with the same ease as California Privet either from hardwood or softwood cuttings and is quite able to withstand the abuse incident to the ordinary handling of a hedge plant, both by the nurseryman and the planter, without serious injury.

Its great claim for the public's consideration as compared with California Privet is its **hardiness** taking in this respect from the pollen parent, **Ibota**, having proven to be perfectly hardy wherever **Ibota** Privet is hardy. This gives this new hardy hybrid a very extended range of usefulness.

The extreme test as to hardiness was proven out in the winter of 1917-18 when **IBOLIUM** Privet stood the test without the slightest winter injury side by side with the California Privet which was not only killed to the ground but in many cases died root and branch.

JOHN YOUNG, Sec'y.



IBOLIUM Privet—The above cut is from photo of a plant of **IBOLIUM** Privet, three years old. Softwood cuttings have been taken from this plant twice this summer. This is the identical plant which was shipped to Chicago for exhibition purposes, was knocking about for at least three weeks and on its return to the Nursery appeared to be little the worse for wear, proving the remarkable vitality of **IBOLIUM** Privet.

CERTIFICATE OF

American Nurseryman's Association, Chicago, Ill.
June 27th, 19

Report of Committee on Plant Exhibits. Jno. S. Kerr, Chairman.

Your committee is pleased to report upon **Ibolum** Privet, originated and now introduced by The Elm City Nursery Company, Woodmont Nurseries, Inc., New Haven, Conn.

Ibolum Privet is the result of cross breeding between the **Ibota** Privet and California Privet and combines the hardiness of the **Ibota** with the fine foliage and growth characteristics of the California Privet. Evidently **Ibolum** is quite an acquisition to the privets for northern sections.

Your committee readily commends this new introduction as very meritorious.

JNO. S. KERR,

ROBERT PYLE,

ALVIN E. NELSON,

Committee.

IBOLIUM Privet is ideal for hardy hedge purposes, for training into specimens, general decoration as a tub plant, also in its natural form wherever a tall, dignified shrub is desired. It also thrives well in the shade. It produces freely large panicles of pure white flowers followed by clusters of glossy black fruits making the whole shrub very ornamental. The usefulness of **IBOLIUM** Privet is almost without limit.

INTRODUCED NOW for the FIRST TIME to the TRADE
for Propagating Purposes—Delivery November 25th, 1919

PRICES: One year strong field grown plants, each.....\$5.00
Summer cuttings, well established, frame plants, each..... 3.00
No discount on these prices for quantity.

We reserve the right to withdraw this offer after a given quantity is booked up as the entire stock of **IBOLIUM** Privet at the present time is only about 10,000.

THE ELM CITY NURSERY COMPANY,

Woodmont Nurseries, Inc.,
New Haven, Connecticut.

Originators and Introducers of **IBOLIUM** Privet
Also Originators and Introducers of **BOX-BARBERRY**

Well rooted summer frame cuttings **BOX-BARBERRY**, \$65.00 per 1000. Fall or Spring delivery. No trade surplus of larger sizes to offer.

HORTICULTURE

Vol. XXX

SEPTEMBER 20, 1919

No. 12

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.

COLUMBIA



We are particularly strong on this splendid new rose at present. Our growers have been very successful with it and are sending us in some splendid cuts.

\$10.00, \$12.00, \$15.00,
\$20.00 per 100.

All other roses in good supply; but be sure and include Columbia in your order.

DAHLIAS, ASTERS, TRITOMAS, COSMOS, HYDRANGEAS, and other seasonable flowers in ample quantity and good assortment.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.

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The Wholesale Florists of Philadelphia

NEW YORK **PHILADELPHIA** **BALTIMORE**
117 W. 28th St. 1608-1620 Ludlow St. Franklin & St. Paul Sts.
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Winter-Flowering Roses

AT REDUCED PRICE TO CLOSE OUT

We have a small surplus of about 3,000 ROSALIND (The Improved Ophelia), strong plants out of 3½-inch pots, which we are offering at a specially low price to clean out, viz.:

\$25.00 per 100 — \$200 per 1,000

FERNS

We have a splendid lot of ferns in the following varieties and sizes, for immediate shipment, viz:

NEPHROLEPIS	Each
Elegantissima, Elegantissima compacta, Muscosa, and Superbissima, 3½-inch pots.....	\$0.35
Dwarf Boston, 3½-inch pots.....	.25
Dwarf Boston, 8 -inch pots.....	2.00
Elegantissima, Elegantissima compacta, and Superbissima, 6-inch pots.....	.75
Muscosa, 5-inch pots.....	.75
Elegantissima and Elegantissima compacta, 8-inch pots....	2.00
Elegantissima and Elegantissima compacta, 10-inch pots....	4.00
Harrisii, 8-inch pots.....	3.00

F. R. PIERSON, Tarrytown, N. Y.

FERNS

Boston and Scottii, pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

5-inch \$4.80 per dozen — \$35.00 per 100

Alyssum Giant Double, Heliotrope, Lantanas, English Ivy, Swainsona, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts. For immediate shipment from 2-inch pots \$2.50 per 100, \$22.50 per 1,000.

Hardy English Ivy, Double Giant Alyssum, strong plants from 3-inch pots, \$3.50 per 100.

Coleus Brilliancy or Christman Gem, 2-inch, \$3.00 per 100.

Send for Catalogue

R. Vincent, Jr., & Sons Co.

WHITE MARSH, MARYLAND

CYCLAMEN PLANTS**Farquhar's Gold Medal Strain**Strong Plants in 3½ in. pots, \$25.00 per 100
Trade Price on Application**R. & J. FARQUHAR & CO.** - - **BOSTON, MASS.****IF in need of RELIABLE NURSERY STOCK**

that is well grown, well dug and well packed

Send to the BAY STATE NURSERIES*Wholesale and Retail***NORTH ABINGTON, MASS.****BOBBINK & ATKINS****NURSERYMEN, FLORISTS, PLANTERS**
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's Fund for Market Development, also "Say It With Flowers" Publicity Campaign.

A Card This SizeCosts only 90c. per Week
on Yearly OrderIt would keep your name and your specialty before the whole trade.
A half-inch card costs only 45c. per week on yearly order.**We are Headquarters for the BEST OF EVERYTHING**
IN**VEGETABLE SEEDS**

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.**"Seeds with a Lineage" All Varieties**

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg. Boston, Mass.**JUST OUT****BOLGIANO'S 1919 SUMMER AND FALL CATALOG OF "BIG CROP" SEEDS**

Special Prices for Florists and Market Gardeners.

Write for a copy at once—it will save you money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.**STUMPP & WALTER CO.****Seeds and Bulbs****30-32 Barclay Street**
NEW YORK CITY**SEEDS, BULBS, PLANTS****JOSEPH BRECK & SONS, CORP.****47-54 North Market Street**
BOSTON, MASS.**BURNETT BROS.**
Seeds, Bulbs, Plants
Etc.**92 Chambers St., New York**
Write for our Illustrated Catalog**W. E. MARSHALL & CO.**
SEEDS, PLANTS AND BULBS**Horticultural Sundries****166 W. 23rd St., NEW YORK****GARDEN SEED**

BEET, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

S. D. WOODRUFF & SONS**82 Day St., NEW YORK and ORANGE, CONN****JUST RECEIVED**
HOLLAND BULBS**FREESIA PURITY**

¼ INCH UP

*Prices on Application***J. M. THORBURN & CO.****53 Barclay Street**
Through to 54 Park Place
NEW YORK CITY**KELWAY & SON****SPECIALIZE IN****SEEDS**

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.**DUTCH BULBS**
PAPER WHITES
JAPANESE LILIES

Write for prices

AMERICAN BULB CO.**172 N. Wabash Ave., Chicago, Ill.****Burpee's Seeds**
PHILADELPHIABLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT**THOMAS J. GREY COMPANY****SEEDS, BULBS AND IMPLEMENTS**
WHOLESALE AND RETAIL

Reselected Strains in Seeds.

Improved Styles in Implements

Catalogue upon application.

16 So. Market Street**BOSTON, MASS.**When writing to advertisers kindly
mention **HORTICULTURE****Little Ads. That Bring**
Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

When writing to Advertisers kindly mention Horticulture

Society of American Florists and Ornamental Horticulturists

NATIONAL PUBLICITY CAMPAIGN.

Our Publicity Committees are greatly pleased at the confidence displayed by florists in the work of the campaign, as evidenced in the many additions to subscriptions already placed that are coming in. The following is a sample of the many letters our Promotion Bureau is receiving: "We are making good our promise of June 30th by enclosing a check herewith towards the 'Say it with Flowers' Campaign, in addition to the one sent on the above date. We hope, and feel confident, that we will be able to double our subscription next year. Wishing you and the Publicity Campaign the greatest of success, we are, Very truly yours, Moraio Brothers, Rye, N. Y."

Those who have not subscribed should ponder upon this condition, for better evidence of the satisfaction the campaign is giving they could not have. But do they need evidence? Have they not that inner feeling that the campaign has already benefited their own businesses? As has been publicly pointed out, the florist business has been among the first of the industries to "come back" after the late disastrous war, and, like Johnnie Walker, it is "going strong." What has been a prime factor in this speedy return to pre-war conditions, and even an improvement upon them, if not our Publicity Campaign?

An everlasting debt of gratitude is owing to the generous subscribers who have made the initial efforts of the campaign possible. Some of these subscribers have donated sum after sum in their enthusiasm over the great service rendered by the campaign. At a recent meeting of the New York Florists' Club, when nearly everybody present was already a subscriber, Max Schling, in an address which disclosed his personal experiences as to the beneficial effects of the campaign, collected additional subscriptions to the amount of several hundred dollars; and the Club itself recommended a subscription of \$500 from its own funds, which recommendation will be formally confirmed at its next meeting. There was some truth in a re-

mark made by one present at that meeting, "I should not like to have my name omitted from that subscription list—the omission would be a brand upon my honor."

At the meeting of our joint committees to be held in Buffalo on October 14th next, there is to be set up for inspection one of the bill board signs which it is proposed to supply to the trade at \$50 each. There should be many hundreds of sites in this country at the disposal of florists for the display of signs such as these, and their use will be helpful not only to the Publicity Campaign but to the florists themselves. Again it is asked that all florists who have available sites along public highways, railroads, or where they will catch the public eye, notify the Secretary, so that full particulars in regard to the signs may be provided at the earliest possible moment. The sooner the signs are installed the better it will be for our industry.

Campaign plans are now very active, and will be more so as the Campaign Fund grows—we cannot say "accumulate," for it is not allowed to do so. Every dollar works as fast as it is collected. Help us toward our goal of \$100,000. Banish that feeling of distrust which all along has been unwarranted, and come over with your subscription. Be a "live florist" in every sense of the term. Foster the interests of your industry, and the industry will take care of you.

New Subscriptions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

Humm & Jones, Oberlin, O.	\$10.00
R. C. Arlin, Bellevue, O.	5.00
Arthur Doebel & Son, Clyde, O.	10.00
Hall's Greenhouses, Clyde, O. (add'l)	5.00
Horn Floral Co., Fremont, O.	5.00
Arthur Ed. Worning, Toledo, O.	10.00
Mrs. E. Suder, Toledo, O.	25.00
Wm. Feniger, Toledo, O.	15.00
Hirzel Bros., Toledo, O.	10.00
Northern Florists' Supply Co., Toledo, O. (1 yr.)	10.00
Paul A. Timm, Toledo, O. (add'l)	5.00
Bowling Green Floral Co., Bowling Green, O.	10.00
Fostoria Floral Co., Fostoria, O.	10.00
T. J. Enright, Fostoria, O.	10.00
Henry C. Woltwaite, Philadelphia, Pa.	5.00
Yeatman & Way, Kenneth Sq., Pa.	5.00
Lawrence Thompson, Kenneth Sq., Pa.	5.00
Wm. Dych, Philadelphia, Pa.	5.00
J. Harry Palmer, Kenneth Sq., Pa.	5.00
Scarlett Bros., Kenneth Sq., Pa.	15.00
Richards Bros., Toughkenamon, Pa.	25.00
Werner Susenmichel, Louisville, Ky.	5.00
Beutel & Frederick, Louisville, Ky.	5.00
Emil Rieple, Rochester, Minn.	15.00

J. W. Ross, Centuria, Ill.	5.00
Mrs. E. A. Moore, Harvard, Ill.	5.00
Fred Longren, Burlington, Ia. (add'l)	10.00
Park Floral Co., Denver, Col.	25.00
Racine Floral Co., Racine, Wis.	25.00
John Nelson Co., Oshkosh, Wis.	10.00
E. C. Koenig, New York, N. Y.	10.00
L. Bruder, New York, N. Y.	5.00
Frank Kerpen, Jr., Jersey City, N. J.	5.00
E. W. Holt, Oakdale, N. J.	5.00
Karl S. Landolt, New York, N. Y.	5.00
Leo Klein, New York, N. Y. (add'l)	5.00
Orehid Florists, New York, N. Y.	5.00
Henry E. Youngquist, Chicago, Ill.	10.00
F. Burmeister, Chicago, Ill.	5.00
Adgate & Son, Warren, O. (add'l)	15.00
Oscar S. Magnuson, Kane, Pa. (add'l)	10.00
H. B. Weaver, Bird in Hand, Pa.	5.00
Philip F. Kessler, New York, N. Y. (add'l)	10.00
Chas. Niemann, New York, N. Y. (1 yr.)	50.00
A. Kottmiller, New York, N. Y.	10.00
Young & Nugent, New York, N. Y. (1 yr.)	10.00
Badgely & Bishop, New York, N. Y. (1 yr.)	10.00
Wm. P. Ford, New York, N. Y. (1 yr.)	15.00
Michael C. Ford, New York, N. Y. (1 yr.)	15.00
United Cut Flower Co., New York, N. Y. (1 yr.)	25.00
Wadley & Smythe, New York, N. Y. (1 yr.)	50.00
P. J. Smith, New York, N. Y. (1 yr.)	15.00
H. L. Bantleman, New York, N. Y. (1 yr.)	10.00
H. E. Froment, New York, N. Y. (1 yr.)	20.00
M. A. Bowe, New York, N. Y. (1 yr.)	20.00
H. H. Burns, New York, N. Y. (1 yr.)	10.00
Wm. Kather, New York, N. Y. (1 yr.)	25.00
John Scheepers & Co., New York, N. Y. (1 yr.)	50.00
S. S. Skidelsky, New York, N. Y. (1 yr.)	50.00
Adolph Lewisohn, Ardsley, N. Y. (1 yr.)	50.00
John Young, New York, N. Y. (1 yr.)	25.00
H. Hamm, New York, N. Y. (1 yr.)	5.00
Smith's Flower Shop, Westerly, R. I.	15.00
Moraio Bros., Rye, N. Y. (add'l)	10.00

	\$895.00
Previously reported	48,851.50
Total	\$49,746.50

JOHN YOUNG, Secy.

1170 Broadway,
New York, N. Y.

DIPLOMAS AND BUTTONS.

Owing to the recent large influx of life members, some delay is being experienced in the furnishing of engrossed diplomas to such members, signatures, engrossing and framing all requiring considerable time. New life members are, therefore, asked to appreciate this condition.

The supply of life membership buttons, furnished at 75 cents each, was early exhausted at the Convention, and delay is being experienced in obtaining a further supply. As soon as received from the maker the buttons will be forwarded.

JOHN YOUNG, Secy.

There is still time for making geranium cuttings and it is probable that there will be a big demand for geraniums next season because of a certain scarcity in other plants. The best plan is to root the cuttings in sand in benches, but they should be kept cool. Private gardeners are more apt to root the cuttings in flats. If you use flats don't forget to give shade for a few days and of course the cuttings must be thoroughly well watered.

FERNS

	Per 100	Per 1000
BOSTONS 2 1/4 inch	\$6.00	\$50.00
ROOSEVELTS ... "	6.00	50.00
WHITMANI	6.50	55.00
WHITMANI COM-		
FACTA	6.50	55.00
VERONA	6.50	55.00
TEDDY, JR.	6.50	55.00

Stock all sold until June 1st.

Order either direct or through
S. S. Skidelsky & Co., Sole Agents
Philadelphia, Pa.

HENRY H. BARROWS, WHITMAN, MASS.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred;
6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.
ADRIAN, MICH.

Snow Queen Canna

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The **CONARD & JONES CO.** WEST GROVE, PENN., U.S.A.

Robert Pyle, Pres. Antoine Wintrow, Vice-Pres.
We are subscribers to the Nurserymen's Fund for Market Development

ROBERT DYSART CERTIFIED PUBLIC ACCOUNTANT

Simple methods of correct accounting especially adapted for florists' use.
BOOKS BALANCED AND ADJUSTED
40 STATE STREET . . . BOSTON
Telephone Main 55

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.
Evergreen Specialists. Largest Growers in America
BOX 418, DUNDEN, ILL.

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

The Best Fern Yet!

You all know Duncan Macawi. He has been associated with all the Nephrolepis sports for twenty years and knows them all from the ground up, and he has found and developed a new one. It is a far faster grower than Scotti; and better in every way. He calls it

MACAWI

and those who saw our exhibit of this great new fern at Detroit fell for it right away. We have booked many orders, and if you want to get in on this—GET BUSY NOW.

2 1/2 inch, \$200.00 per 1,000; 6 inch, \$150.00 per 100.

YELLOW CALLA ROOTS.....per 100, \$20.00, \$25.00, \$30.00

C. U. LIGGIT, Office 303 Bulletin Bldg. Philadelphia, Pa.

FALL BULBS

PAPER WHITES, 12-15, 13-15 and 14-16c/m

CALLAS (White), 1 1/2" and 2-2 1/2"

DUTCH BULBS

JAP. LILY BULBS

NARCISSUS, Emperor and Empress

PEONIES, RAFFIA, BAMBOO CANES, Etc.

Write for Import Prices

McHUTCHISON & CO., The Import House
95 CHAMBERS STREET : : : NEW YORK

IBOLIUM The New Hybrid HARDY PRIVET (L. Ibota x Oval- folium)

Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery.

The Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.
Introducers of BOX-BARBERRY

A Hit at the Detroit Convention

Nephrolepis Macawi—Wavy leafed sport of Scotti. A vigorous quick grower holding good color.

We are authorized selling agents.

Immediate delivery 2 1/2-inch plants. \$20 per 100. \$200 per 1000.

L. J. REUTER CO.

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329 Waverly Oaks Road
Waltham, Mass.

MICHELL'S BULBS

WHITE CALLAS (AETHIOPICA)

Clean healthy bulbs

	Doz.	100	1000
1 1/4 to 1 1/2 in. diameter	\$1.00	\$7.00	\$65.00
1 1/2 to 1 3/4 in. diameter	1.30	10.00	95.00
1 3/4 to 2 in. diameter	1.75	15.00	120.00
2 to 2 1/2 in. diameter	2.25	15.00	140.00

FREESIA "PURITY"

Flowers almost twice the size of the regular type, and a pure glistening white.

	Doz.	100	1000
First Size Bulbs.....	.20	\$1.25	\$10.00

NEW GIANT COLORED FREESIAS
These varieties are equal to the "Purity" in size; have excellent form and splendid texture.

	Doz.	100	1000
BLUE	\$1.25	\$8.00	\$75.00
LAVENDER	1.25	8.00	75.00
PINK	1.25	8.00	75.00
MIXED. All colors..	.75	5.00	40.00

NARCISSUS, PAPER WHITE GRANDIFLORA

First Size, 13 ctm up (1250 bulbs to case), Per doz., 40c.; \$2.50 per 100; per 1000, \$21.00.

DUTCH BULBS ARE ARRIVING NOW
Also all other Seasonable Bulbs, Seeds and Supplies. Send for New Wholesale Price List, if you do not receive a copy.

MICHELL'S SEED HOUSE

518 Market St., Philadelphia

SEEDS AND BULBS Boddington's

128 Chambers St., N. Y. City

HORTICULTURE

Vol. XXX

SEPTEMBER 20, 1919

No. 12

THE TALK OF THE TRADE

A prominent man in the trade and one who usually knows what he is talking about predicts that the prices of gladiolus bulbs America will go to \$30.00. Inasmuch as they have been down to \$12.00, this may seem like a difficult prediction to understand. The fact is, though, that the supply of Americas has become strangely low. It is such an easy bulb to grow and has been so common during the past few years that stocks have been neglected, with the result that the market has been found unexpectedly short. This still remains one of the most popular, if not the best, of all of the florists' gladioli, and the demand continues very heavy. Undoubtedly many growers will begin to stock up, but they are likely to find the prices of the bulbs higher than some varieties usually considered more expensive.

Speaking of "glads," it is interesting to find that some of the finest varieties, such for example as Halley, have been almost a drug on the market for several weeks past, while Augusta, which at first blush would seem to be a much less desirable sort, has sold heavily. For several years past the sale of Augusta has always been large during the fall. The explanation is that it is a light colored variety which is best for funeral work. Panama has also sold well and has brought three or four cents more than Halley.

The demand for roses has continued heavy all through the summer. In few markets has there been a surplus. If we had only the roses which were on the market a few years ago, probably the story would be a different one. When the single Killarneys and a few other poor keepers were relied upon the summer trade always slumped. Now, however, the market is filled with much stronger and more enduring kinds, such as Columbia, Maryland and Premier, with the double white Killarney. This very fact that the summer trade in roses has been sustained justifies all of the time and attention which have been required to produce roses of the high character shown by those mentioned. It is ex-

pected that some of the newer roses being put out this year will be good enough to add to the list.

Perhaps florists will remember that at a meeting some time ago Henry Penn said that the Christmas market was always short of yellow. It had plenty of green and plenty of white, but yellow, which could always be obtained at Thanksgiving and at Easter, was lacking. This lack is being supplied by Solanum Orange Queen. This splendid cherry, which was originally put out by Carl Hagenburger, is a sport of Cleveland and has identically the same foliage and habits of growth. The berries, however, are orange colored and make a fine display. Up to this year the plant has not been seen generally in the trade in New England, but its distribution is much wider this season, and many florists will be showing it, both at Thanksgiving and at Christmas this year.

Reports from plant growers show that orders are being placed much earlier than last year, when dealers found it very difficult to get what they wanted, especially in the line of small plants, when the holidays were close at hand. This is going to be better for all hands, and will prevent a rush of business at a time when it is difficult to handle, as well as prevent much disappointment. Apparently the demand is going to be very large.

It seems rather strange that so few retail florists are familiar with *asparagus elongatus*, which is sometimes called the cut-and-come-again asparagus. This is a plant which is worthy of more general use. Perhaps it would not pay anybody to raise it in a large way, but a few plants will keep the retail florist supplied with a good green at all seasons, for the plant makes new growth very rapidly. There is an increasing call for this asparagus, and it is recommended especially to retail florists in the smaller places who have houses of their own. One large grower in Georgia has just ordered a big supply from W. A. Manda, of New Jersey, and will grow it commercially.

RED CROSS CARNATION BECOMES ETHEL FISHER.

As the Red Cross Society objects to its name being used in a commercial way, the name "Red Cross," given to the new red carnation has been dropped, and the name "Ethel Fisher" substituted. It will be known in the future under the new name.

In his circular, Mr. Peter Fisher, of Ellis, Mass., the introducer, gives this description:

Ethel Fisher is the result of three generations of seedlings commencing with Beacon and Mr. C. W. Ward's Crimson No. 211. The color is a bright glowing red, like Beacon at its best. The plant has a healthy, upright, open habit of growth, producing early and freely on long, stiff, wiry stems, uniform flowers that average $3\frac{1}{2}$ inches, supported by a strong calyx that rarely bursts.

BOSTON GARDENERS' AND FLORISTS' CLUB.

The Boston Gardeners' and Florists' Club held the first meeting of the season at Horticultural Hall Tuesday evening. It was mostly an experience meeting, several members telling of their summer trips. Herman Bartsch gave an interesting account of his visit to Detroit to attend the S. A. F. convention. Those present were interested to hear what he had to say about the greenhouses of Detroit, which do not seem to be as well stocked as some of those in the East. Mr. Andrew Christensen, of Stoneham, told of his trip to Florida and other southern states. He said it is difficult to grow commercial flowers—to compare with those of the North. Southern carnations are not a success. Even gladioli and asters are sent in from the North, and the roses grown there soon lose their size. Mr. Jas. Wheeler talked interestingly about private estates which he had visited in Rhode Island, Connecticut and New York.

An award of merit was voted to the L. J. Reuter Company for *Nephrolepis Macawi*, and honorable mention to W. N. Craig, Faulkner Farm, for collection of peaches, *Artemisia lactiflora* and seedling gladiolus *primulinus*.

Congressman Davey's Suggestion

HOW TO OBTAIN A MODIFICATION OF THE PLANT EXCLUSION RULING.

At the recent convention of Gardeners at Cleveland, Congressman M. L. Davey, Ohio, made a recommendation as to a practical way to secure a revision of the Federal Horticultural Board's drastic plant exclusion measure. Congressman Davey's remarks were so important and so thoroughly worth careful consideration by gardeners, florists and nurserymen all over the land that they are reproduced in full, as follows.

During the time that is at my disposal, I wish to discuss some very practical questions which have an interesting and important bearing upon the profession which you represent.

Let me first take up the matter pertaining to prohibition of plant importations, known as Quarantine Bill No. 37. It is not my proper function to condemn this act of the Federal Horticultural Board inasmuch as my office would make it improper for me to assume that position at this time.

I can, however, make certain practical and helpful suggestions regarding the best method of procedure to get results. I may go far enough to say that in my judgment the Federal Horticultural Board has gone too far. I believe that there are elements of good in this ruling and likewise I believe that it has gone far enough beyond the actual necessities of the situation so that certain injustices have been done.

Now then, all you want will be the elimination of the injustice and the benefits of fair consideration for the proper interests of your profession. You have a right to ask and demand an impartial hearing on this important question. You do not want any action which is improper. You only want justice and fair play. These things can best be determined by an impartial hearing. Obviously the Federal Horticultural Board would not be in a position to give an impartial hearing, because they have already reached a decision and it is most natural that they should be prejudiced in favor of their own decision. They are human like the rest of us.

My suggestion is that you proceed to get a full hearing of this matter before the Agricultural Committee of the House. You can get such a hearing if you will proceed in a practical way. The Federal Horticultural Board will certainly listen to the Agricultural Committee of the House because they get their appropriations through that

Committee. The Agricultural Committee, in turn, will certainly listen to the urgent request either of their own members or a reasonable number of other members of the House. No one can deny you the benefits of a hearing. That is the least thing which the Agricultural Committee of the House can in fairness do.

You are not asking this Committee to pre-judge your case. You are not asking them to take your side. You are asking them merely to arrange for a hearing at which all the facts from both sides may be fully and freely presented and from which they can draw a just conclusion as to the merits of the case.

If you cannot make a good case, you naturally would not expect favorable action. But if you can make a good case you will expect such action as will result in a proper modification of this Quarantine Rule.

Those who are interested in this matter are sufficient in numbers to secure such a hearing if they will proceed in a determined manner. Let me tell you something about the attitude of a Member of Congress. Those whom I have met are practically all fine fellows personally. They are trying to do right in the service they render to their constituents. They are human, of course. Most men are in Congress because they want to be there. Most of them want to stay there. They recognize the fact that the best way to stay there is to render satisfactory service to the people whom they represent.

So if each of you will tell your Congressman that you think an injustice has been done the horticultural profession by this Quarantine Bill No. 37; that you insist upon an impartial hearing of the whole question before the Agricultural Committee of the House; that you ask him to use his influence to secure such a hearing, I am sure he will gladly respond favorably.

You are not asking him to commit himself as to the merits of the case. You are asking him merely to help you secure an impartial hearing, which is perfectly right and proper.

Take my advice and don't write a form letter. Take the facts and write them in your own way to your own Congressman. Don't let him put you off with a formal acknowledgment. Tell him you want to know the results of his efforts. If he does not report to you within a reasonable length of

time, go after him again. Let him know that you expect results. If he knows that you mean business, you can take my word for it that he will "step on the gas" and try to help you.

Your Congressman wants your votes and the votes of your friends. As long as you do not ask him to do anything wrong or injure anyone else, or violate the rules of proper conduct, he will be glad to help you, if he knows you mean business.

You cannot expect him to do anything for you unless he knows what you want. You are not asking him anything improper. Not only will he be glad to help you, but you have an absolutely perfect right to go to him for help. He is your representative and subject to your call on anything that pertains to his office. Don't feel that you are asking him something to which you have no right. He knows that you have a right to go to him and that you have a right to insist upon his help, within the limits of propriety.

If every man interested in the horticultural profession will make it his individual business to take this matter up with his own Congressman and insist upon positive help and definite action and keep after him until he gets a satisfactory reply, I can almost guarantee that a hearing will be granted.

From that time on it is entirely a question of making your case before the committee. Also I can almost guarantee that any recommendations, which the Agricultural Committee sees fit to make on the basis of the facts and merits of the case as disclosed to the hearing, will be cheerfully and promptly carried out by the Federal Horticultural Board.

If I should talk to you indefinitely, I could not give you any more practical method of procedure nor one more likely to be successful. I commend it to you for prompt and vigorous action

RECENT PATENTS.

- 1,310,539. Multiple Plow. Charles Marius Motte, Paris, France.
- 1,310,582. Harrow. Charles S. Sharp, Auburn, N. Y., assignor, by mesne assignments, to Individual Harvester Co., N. J.
- 1,310,583. Cultivator. Ernest C. Smith, Hoosick Falls, N. Y., assignor to Walter A. Wood Mowing and Reaping Machine Co., Hoosick, N. Y.
- 1,310,710. Check-Row Attachment for Planters. Ira R. Phipps, Mattoon, Ill.
- 1,310,924. Crust-Breaking Attachment for Cultivators. Takano Ono, Sedgwick, Colo.

George Watson's Corner

Araucaria excelsa is one of the scarcest items on the market today. Belgium was its headquarters, and the war put Belgium out of business. It will take a good many years before we see this charming house plant occupying its old place in the homes of the people. The only lot we have heard of in existence this year is at Dreer's, and these arrived in such poor condition last Spring that it was decided to give them another season's



Samuel S. Pennock

growth before putting them on the market. They are in pretty fair shape now and will be offered to the trade in October. They run in the usual commercial sizes 1, 2 and 3 feet. Many inquiries are already on file for these so that it is not likely they will last long.

In appreciation of faithful service the H. F. Michell Co. have issued an insurance policy to all their employees. This action is voluntary on the part of the Company and is entirely at their expense, no reduction from wages nor contributions of any kind by the employee being required. This kindly and generous act is deeply appreciated and is a high tribute to the fine instincts which have always been the strong points guiding the founder and president Henry F. Michell as well as of all other members of this well known and successful seed company. And it will undoubtedly bear good fruit in accentuating the loyalty and enthusiasm of every worker.

Paper White Grandiflora

French bulbs. Splendid quality. First shipments now here. Send your order at once. They are going fast. XX, \$21.00; XXX, \$24.00 per 1000.

Purity Freesia—Vaughan's Improved

Tie up with a house that has a Record on this Money Making Florists' Flower. Sound, well-ripened bulbs. \$6.00, \$8.00, \$10.00 per 1000.

43 Barclay St.
New York City

VAUGHAN'S SEED STORE

33 W. Randolph St.
Chicago, Ill.

In this connection I have great pleasure in recording that another Philadelphia house in a different line, the S. S. Pennock Co., wholesale florists, have performed a similar act for their employees and the same encomiums are deserved and recorded in equal measure. I am proud to have known and associated for the past thirty years with such men as Samuel S. Pennock and Henry F. Michell. They are a credit to the good old Quaker City and we all take our hats off to them.

The dahlia season may now be said to have opened, and the September gardens and flower markets are gay with the early flowering sorts. The Dreer Nurseries at Riverton are well worth a visit just now for this one great fall flower alone. Mr. Mickel, who is the firm's dahlia enthusiastic, has some very fine new ones, and he is busy showing to admiring visitors these up-to-date wonders. Among the most notable in flowers at present are:—Mme. Coissard, a peony flowered variety, large and perfect in form, crimson, and beautifully marked and suffused with white; Oregon Beauty, of the decorative type, and of a shining oriental red with golden and garnet shadings, a large flower and a very free bloomer; Fackel, another of the peony flowered class, a rich coral red, shaded yellow at the edges, and a very sprightly attractive flower. In the decorative class there are three very fine ones now in bloom—Jack Rose, the color of that old time favorite rose less generally known by its proper cognomen General Jacquement, Easton, a medium size flower of a brilliant Turkish red, fine form and very free-flowering; Mrs. J. Gardner Cassatt, a fine high flower of an especially pleasing shade of rich manoe pink. In the show and fancy section two very fine ones are to be seen—Dorothy Peacock, a shell pink, very large flower and of fine form; and Emily, a solferino with white markings. We have notes of a

number of other new and fine early ones, which we hope to speak of in our next issue.



H. F. Michell

EXHIBITION OF FRUITS AND VEGETABLES AT BOSTON.

The autumn exhibition of fruits and vegetables by the Massachusetts Horticultural Society will be held at Horticultural Hall, Boston, Thursday to Sunday, September 25 to 28.

Apples, pears, peaches, plums, and grapes of nearly every variety suitable for cultivation in this section of the country will be on exhibition. Four hundred prizes amounting to two thousand dollars are offered for exhibits of fruits and vegetables, including fifty prizes for exhibits of the products of amateur home vegetable gardens.

The Massachusetts State Department of Agriculture will award six hundred dollars in prizes for the best exhibits of fruits and vegetables grown in the state. Schedules of the prizes offered can be had on application to the Secretary at Horticultural Hall, Boston.

WM. P. RICH, Secy.

HORTICULTURE

Established by William J. Stewart in 1904

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A flower week

Philadelphia is falling into line with definite and well arranged plans for a flower week next month. A committee has also been appointed in Albany to consider the plan. Why should other cities lag? The idea is one that is bound to win a hearty response from the public and it opens up no end of possibilities. What Sunday paper is there that would not gladly run a feature story with illustrations about its city's flower business on such an occasion. There are stores in plenty that would gladly decorate their windows with flowers during flower week. Restaurants and hotels would help. Souvenir booklets with helpful hints about the care of cut flowers and the buying of potted plants might be distributed. These are but random thoughts. Many other suggestions will present themselves. It is the Washington Florists' Club which started the plan and this club would like to see the campaign made nation wide. So would HORTICULTURE. It is the best kind of publicity, and nicely supplements the big campaign of the S. A. F. Let us all give the plan a boost.

The first step

There is food for thought in the plan outlined by Congressman Davey for obtaining a modification of Quarantine No. 37. The Congressman's suggestions are given somewhat at length on another page and are worthy careful reading. Perhaps this is the next step to be taken by the nurserymen, gardeners and florists of the country. Congressman Davey no doubt understands the situation thoroughly. If he says that the agricultural committee can be persuaded to conduct a hearing, such a hearing should be asked for. It is probable that this committee would be impartial and unbiased. At least, it is reasonable to expect that this would be the case. No doubt there would be a hard fight before any action could be obtained by Congress itself, but the situation would be presented in such a way that the members of Congress and the public in general could form an unprejudiced opinion as to the merits of the case. There is much work to be done, however, if the facts are to be set forth as cogently, as forcefully and as convincingly as they should be. If the agricultural committee of the House is the proper tribunal before which arguments should be presented, the question comes, "Are the members of

the trade, the gardeners and the estate owners who have been compelled to suffer by the Federal Horticultural Board's arbitrary and drastic ruling, ready for the first step?"

Prices to stay

It is difficult, apparently, for some flower growers to realize that the higher prices of the past few months are likely to remain for a long time. There is often a tendency to show the white feather and risk a loss of reasonable and honestly earned profits rather than the possible loss of a customer. In this connection it is interesting to consider the advice which the editor of the *Flower Grower* gives his readers, who are largely growers of gladioli. He says:

"Certain commercial growers, who, as a matter of fact, only grow a part of their stock, but act as brokers or middlemen on a large portion of their sales, are already offering to buy large quantities of gladiolus corms for future delivery.

"In these days of high production costs and steadily advancing costs, it is the height of folly for any grower who has put his hard labor into producing high class stock to sell it to be delivered several months later.

"Last year we advised growers who were inclined to be weak-kneed on prices that they were making a mistake. We want to repeat this caution again this year. There is absolutely nothing in the situation to cause low prices for any sort of flower stocks, and the tendency is always upward on prices with the labor conditions under which we are now working. Don't sell in advance of the actual harvesting of the crop, and then be sure that you know what values are before disposing of same."

COL. WILLIAM W. CASTLE

It is with the deepest regret that we announce the passing of Col. William W. Castle, president of Horticulture Publishing Co. Col. Castle died at his home in Weymouth Sunday afternoon and the funeral was held Wednesday. He had been in failing health for some months but retained his keen and alert mentality almost to the last. Col. Castle had many acquaintances among the florists and nurserymen of the country. He was a warm personal friend of the late William J. Stewart, founder of HORTICULTURE, and became active in the conduct of the paper during Mr. Stewart's long illness. Previously he had won a reputation among greenhouse men through his invention of the Castle Circulator for boilers. He was a member of the S. A. F.

Col. Castle was born in Cleveland, O., Sept. 21, 1843, the son of the president and principal owner of the Cuyahoga Works and the last mayor of Ohio City. His grandfather was a soldier in the revolution with Ethan Allen at Ticonderoga, and his father was an officer in the war of 1812. At the age of 17 Col. Castle entered the army as a member of the Cleveland Grays. He came to New England in 1872. For some years he was special examiner at the Boston Custom House. Col. Castle had traveled widely and everywhere he went he made friends. His devoted family will have the sympathy of all who knew him.

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

Trade Prices on Application

R. & J. FARQUHAR & CO.
BOSTON, MASS.

GLADS FOR NEW GROWERS.

"If you are going to buy stock for planting put most of your money into bulblets with say 100 or so each of No. 3 and No. 4 sizes of each variety selected," writes L. H. Reed in the Flower Grower.

"Don't undertake too many varieties say 3 to 6 kinds to begin with. It is some little bother for new beginners to care for and keep separate too many kinds. What varieties? Oh, always the best you can afford but never any that are not very prolific producers of bulblets. From a quart to a peck of a kind will be enough for most new growers.

"If you have some stock on hand save it all carefully. If it is of cheaper kinds and you want better ones, sell them and buy the best you can afford. It does not cost any more to grow bulbs that are worth \$50 or more per thousand than it does those worth \$10 provided they are just as prolific. The only additional cost is in the stock planted. If you have only a limited amount of space available for growing, the high priced ones will help bring up receipts from ground cultivated.

"If you expect to grow for wholesale trade, plant mostly of such varieties as are used in large quantities. Probably there are nearly as many bulbs grown of America as of all other varieties combined, but it still demands a fairly good price.

"Probably 90 per cent of all Glads grown for cut flower purposes are either pink, white or very light yellow. So in making selection of varieties it is wise to select largely of those colors.

"If you have the ability to build a retail trade—which many have not—you can select a wider range of colors and more varieties but for a starter it is wise not to grow too many varieties in quantity.

"Test out a few promising new kinds each year and if they prove prolific

and satisfactory you can soon grow up a stock. If not get rid of them and confine your efforts to varieties that will make you money."

NASSAU COUNTY N. Y. HORTICULTURAL SOCIETY.

The regular monthly meeting of the above society was held in Pembroke Hall, Glen Cove, on Wednesday, Sept. 10th, at 7 p. m., President Joseph Adler presiding. Fred Hewlett, Ed. Martin, John Nevin, John McPhee and Peter Smith were elected to active membership. Five petitions were received. The judges appointed for the monthly exhibits were Messrs. Wm. Churchill, Theo. Scott and Chas. Young. The following awards were made, competition: 12 potatoes, 1st, Frank Petroccia; 1 out-door melon, 1st, G. W. Wyatt; 3 heads of celery, 1st, Frank Petroccia. Exhibition: 3 heads of celery, exhibited by Wm. Milstead, awarded certificate of culture. William Noonan was appointed manager of the Dahlia Show to be held at the Matinecock Neighborhood House, Locust Valley, on Thursday and Friday, Oct. 2nd and 3rd. Harry Goodband was appointed manager of the Fall Show to be held on Oct. 30-31st. A letter of sympathy was ordered sent the family of our late member James Elmslie. Mr. Elmslie was a charter member of this society and the passing away of so old a member was received with deep regret by all. Our next meeting, which will be held on Wednesday, Oct. 8th, will be known as Dahlia Night, Competition: 12 cactus, 12 peony and 12 decorative Dahlias, any color.

At the conclusion of this meeting a Welcome Home party will be given in honor of our members who gave their service in the World War.

HARRY GOODBAND, Cor. Secy.

ROCHESTER, N. Y.

George T. Boucher, at a meeting of Rochester Council, 178, Knights of Columbus, was elected as Grand Knight, after serving during the past year as Deputy Grand Knight.

The first autumn meeting of the Rochester Florists' Association was held Sept. 12th, the general situation as affecting the business locally was discussed. Geo. T. Boucher and Albion H. Salter, who attended the National Convention of Florists and F. T. D. A. in Detroit recently, talked on matters brought up at the convention. The association passed resolutions on the death of George Arnold, a member who died a few days ago, and also planned a corn roast to be held on Sept. 27 at Durand Eastman Park.

I am now connected with the

**BOSTON
FLORAL
SUPPLY
COMPANY**

*I have no interest in any
other concern.*

*I joined the ranks of the Boston
Floral Supply Company
after months and months of
consideration.*

SAMUEL MANN.

Formerly with B. A. Snyder Company, Boston

RAMBLING OBSERVATIONS OF A ROVING GARDENER

Not long ago I had the pleasure of visiting the Crane estate in Ipswich, Mass., which is now under the supervision of Robert Cameron, formerly of the Harvard Botanical Garden. This is one of the most extensive estates in New England, but has been developed in a quiet way, inasmuch as Mr. and Mrs. Crane dislike too much publicity. All the work has been done during the last twenty-five years, which is difficult to realize when one views the many large evergreen and other trees to be found scattered over the place.

The so-called Italian garden is more like an English walled garden. There are no bay trees or similar plants such as one finds in the average Italian garden. The borders of perennials are well arranged, and a water garden at one end has great possibilities.

The most interesting plants which I saw in this garden were a number of *Pleroma Macranthum* in tubs on the wall. This is a climbing shrub which is occasionally seen in greenhouses and which has handsome violet-purple flowers. I have never seen it grown as a standard before. The vines are trained over a wire frame on a stand-ard about three feet high. In a quiet garden like that on the Crane place the effect is most satisfactory. The idea is one which is worth the attention of other gardeners who are familiar with the plant. Of course the specimens have to be taken into the greenhouse when cold weather comes on. The plant is easily grown from cuttings, flowering quickly.

Some annuals have been used in the garden and other places around the grounds, among the most conspicuous being the deep purple petunia, which came to this country from Germany just before the outbreak of the war. It is called *Veitchenblau*. I doubt very much if this seed has been widely disseminated in this country, but the plant is certainly most attractive and excellent for cutting. If I am not mistaken it was used to some extent in the Fenway garden at Boston on the occasion of the convention held by the Society of American Florists and

Ornamental Horticulturists some years ago.

Mr. Cameron, who made something of a study of sedums at Harvard is planning to use them extensively in the crevices of a long wall at the side of a road. There seems to be an opportunity here for a most interesting arrangement of sedums, the number of which is much greater than is commonly realized. The one stone crop with which everybody is familiar is *S. spectabile*, which is in bloom now in hundreds of gardens. This is really an excellent border plant, and can be used nicely in a rockery, although not so well adapted to that purpose, perhaps, as some of the other sedums.

It is a little surprising that more attention has not been given to the blue salvias, which, while not pretentious flowers, give a color to the garden. Of all the salvias, though, it seems to me that the comparatively new *uliginosum* is the one to be most favored. This plant, which I believe came from South America, is a remarkably fine perennial, having a shade of blue not surpassed by that of any other flower. It is perhaps unfortunate that it is so tender that it doesn't winter over very successfully. Still this is no great drawback, because it is very easily started from cuttings, rooting almost as readily as *coleus*. I know of one instance where a woman without a greenhouse made some cuttings in the fall and stuck them into a pot where they made good plants which were set out in the spring and bloomed nicely that season.

Not long ago I saw an excellent specimen of *Schizophragma hydrangeoides*. It was a much larger plant than the one at the Arnold Arboretum, and apparently its blossoms later than *hydrangea petiolaris*, another climbing form with which it is often confused.

It is a matter of satisfaction at the Arboretum that this beautiful plant, after forty-three years of failure, is at last established on the Administration Building where it has flowered this year for the first time. It clings as firmly to the brick wall as *Hydrangea petiolaris*; the leaves are smaller, more circular in shape, more closely toothed and of a darker color. When

in flower *Schizophragma* is more interesting, although not as showy as the *Hydrangea*, for instead of the surrounding ring of neutral flowers there are only two neutral flowers to each of the divisions of the large compound inflorescence; these neutral flowers are white, ovate, often an inch or more long, and hang on long slender stems an inch in length. *Schizophragma* appears to be an exceedingly rare plant in American gardens in which *Hydrangea petiolaris* often passes for it.

NEW PUBLICATIONS.

Manual of American Grape-Growing, by U. P. Hedrick, published by the Macmillan Co., of New York, price \$2.50.

It seems safe to claim that this is the most complete popular book on grape-growing in North America which has yet been published. Because it is a book which can be read and understood by the amateur, however, does not mean that it lacks in any way accuracy or detail. It discusses the practical questions of climatic limitations, choice of site, land and its preparation, fertilizing, tillage, planting, pruning, training and marketing. What else would one expect to find in a book of this sort. The very fact that Professor Hedrick, who is in the New York Agricultural Experiment Station, is the author, is sufficient warrant for the statement that it is authoritative, for Professor Hedrick has had long experience in the study of the grape in all its aspects, his reputation being more than national. This book, therefore, is a very valuable addition to the library of all who are interested in fruit growing.

SEED TRADE REPORTS

The proceedings of the 37th annual convention of the American Seed Trade Association, held at Chicago in June, have just come to hand. They are very attractively bound and make a report which will be of no little interest and value to all who are concerned with seed production or the sale of seeds. The frontispiece is an excellent photograph of Frank W. Bolgiano.

PEONY SEED.

Peony seed for planting must be picked as soon as it is brown. If allowed to dry it will take much longer to germinate if it will germinate at all. As soon as picked, put in sand or soil until time to plant—this prevents its drying.

WISCONSIN HORTICULTURIST.

THE GARDENER'S SECTION

PREPARING PLANTS FOR EXHIBITION.

To a beginner who is anxious to win prizes for flowers or plants at fall fairs and exhibitions, the best advice that can be given to enable him to do so is, "show the best material you have and read the rules thoroughly."

In regard to the first part of this advice, he will naturally ask, "How am I to know the best?" To help him to understand what the judges consider the best, I shall discuss in regular order some of the points which the judges have in mind when making their awards.

With regard to the second part of the advice, I would advise both beginners and experienced exhibitors to read carefully and observe the requirements of the prize list. A judge has no option but to observe the rules in the schedules, and if he finds, as judges frequently do, that four flowers are exhibited where three are called for, he has no option but to disqualify such an exhibit, even supposing those four flowers happened to be the finest in the whole exhibition. This may appear to be unfair to a beginner, but it must be pointed out that the rules are made to be observed and what is fair for one is fair for all.

Another important thing for a beginner to bear in mind is to display his exhibit to the best advantage. He can learn from the older exhibitors just how to do this. Still another important point is with regard to cutting exhibits. A judge will seldom examine flowers which are wilted. Consequently, it is necessary to have flowers or plants looking as fresh as possible. It is better to cut flowers either early in the morning or late in the evening of the day before they are put upon the tables. Immediately they are cut they should be placed in water, and, while it is not necessary that the water should be cold (in some cases warm water is preferable), the flowers themselves should be placed in a cool place. The cellar or the house is suitable. Any broken leaves should be removed, and of course, injured blooms should not be shown under any consideration.

In the case of plants in pots, the top soil should be carefully stirred, and any litter removed. The pots also should be cleaned, and the whole plant overhauled, so as to give it the appearance of freshness and neatness. Sometimes potted plants may be great-

ly improved for exhibition purposes, if they are pruned and cleaned, several weeks before they are required for exhibition purposes. This gives them a chance to appear more natural.

CANADIAN FLORIST.

LIFTING AND SORTING DAHLIAS.

The bulletin of the American Dahlia Society has the following to say about the care of dahlia roots:

After the plants are cut down by frost in the autumn, it is customary to allow them to stand for a week or two, on the theory that the roots may thereby perfect their ripening for the winter and that they are better off in the ground than they would be in any cellar. However, if there is much tendency to throw up suckers or new shoots, it is probably better to dig the roots at once, as the new shoots are likely to weaken the roots by drawing away more than they give back. And one must remember that it is from the crown or the stem base rather than from the roots that the shoots for next year are to come and that this crown might be damaged by a freeze that would not injure the lower-lying roots themselves.

When the lifting time comes, or a few days before, the stalks should be cut close to the ground, using a large knife, sickle, or bush scythe, and making a smooth clean cut. As a root with a broken neck is commonly useless, much care should be exercised in lifting the roots. It is best to use a spade and to drive it down for twelve inches or so all the way around at a distance of twelve inches or more from stalk, and then lift the whole mass carefully by forcing the spade deeply under the center. It is an advantage if two persons can work together and lift at the same time from opposite sides. Though not so important as the preservation of the neck, it is also advisable not to cut off the tip of the fleshy root, as it is from this end that the first and most vigorous fine roots are likely to come the next spring. Moreover, cuts and abrasions of the surface give the rot-producing fungi a better chance for attack.

After lifting, it is well to let the roots dry off for a few hours, with a view especially of removing any excess of sap or moisture from the pith or hollow of the stump, as this loose fluid might prove a culture medium for the spores of moulds and perhaps

might prove injurious in other ways. Some dahlia experts, in packing away roots for the winter, turn the stump downwards so that any excess moisture can drain out. This seems to work well, though in turning the clumps upside down, there is more danger of breaking the necks of the roots than in leaving the clumps in the more natural upright position. It is not necessary or desirable to shake off all the adhering soil before carrying the roots to the cellar, as any naturally adherent earth appears to help prevent drying out and shriveling during the winter.

In a cellar without furnace heat, dahlia roots usually keep all right when stored away on shelves or in boxes or barrels without any special covering. In cellars with a furnace it is usually better to wrap the clumps in newspapers or to cover them with sand, coal ashes, or with fairly clean soil from the field or garden, but soil containing much decaying organic matter is to be avoided for this purpose. When the roots are covered in this way and when the containers are placed as far away from the furnace as is consistent with safety from freezing, the roots commonly come through the winter in a vigorous and plump condition. However, roots that have shrunken much and show no buds or sprouts at planting time are often viable, as may be determined by test. If sprouts have started and are more than two inches long, it is usually best to break them off and depend upon new buds for the future plant. Long cellar-shoots commonly develop into weak hide-bound stems.

COMING MEETINGS AND EXHIBITIONS.

New Haven, Conn.—New Haven County Hort. Society, annual fall show, Sept. 30 and Oct. 1.

New York City.—The American Institute and the American Dahlia Society, exhibition of dahlias in the Engineering Bldg., 25-33 West 39th St., Sept. 23 to 25. Sec'y, William A. Eagleson, 322-24 West 23rd St.

New York City.—The American Institute and the Chrysanthemum Society of America, exhibition of chrysanthemums in the Engineering Bldg., 25-33 West 39th St., Nov. 5 to 7. Sec'y, William A. Eagleson, 322-24 West 23rd St.

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We have been enlarging our store building, spending several thousand dollars to do it. The work was done on an agreed plan, but when we got about three-quarters through, we found it was costing so much more than we expected that two of the three partners agreed to change the plan and stop. The third man, who had been doing most of the financing, was much opposed to this and insisted on going ahead and completing the job. We did not agree, but he has gone ahead and borrowed from the bank, making a note in the name of the firm, enough money to complete the entire alteration. As soon as we learned of this, we served notice on the bank that the loan was not made with our consent and the partnership would not be bound by it, but the president of the bank, in conversation with the writer yesterday, said the transaction was binding on the firm and we should have to stand for it. Is this true, after an agreement and the action taken by us against this particular loan.

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The question to be answered here is this:

After a partner has agreed with his fellow partners not to borrow money on the firm credit without their consent, or after he has been instructed by a majority of the firm, in a particular case, not to borrow, has he still the power to go out and make loans for which the firm will be liable?

Restrictions on partner's authority, either in the partnership agreement or in a separate agreement, do not bind third parties who have no notice of the agreement.

Under the well settled law everywhere, he has. This is one of the weaknesses and dangers of the partnership relation, which, however, can scarcely be guarded against even if you are wide-awake and do all you can. It makes no difference what you put in your partnership agreement. You can put clauses in there absolutely forbidding your partner to borrow money in the firm name, as this correspondent did, but the very next day he can go out and do it, provided he goes to a bank or to an individual who knows nothing of the partnership agreement. The following, which is from a leading case, is the settled law:

Restrictions on partner's authority, either in the partnership agreement or in a separate agreement, do not bind third parties who have no notice of the agreement.

A partnership is liable for money borrowed by one of the members, on the credit of the firm, within the general scope of its authority, and according to the usual course of its business. Nor will the lender's right be affected by the borrowing partner's misappropriation of the money, if the lender acted in good faith when he loaned it.

Recently a case occurred in my own experience which shows how far this principle is carried. A and B were partners in a mercantile business. In the beginning they made a partnership agreement providing that neither should borrow any money, on the firm credit, without the other's consent. In spite of this A went to a bank and borrowed \$4,765.81, signing a note "A and B, by A." Before the note came due B died. The firm had little or no assets, and when the note became

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due the holder presented it as a claim against B's estate. The claim was most bitterly fought on the ground that the loan was made by A without B's authority, and in violation of the partnership agreement; that B had derived no benefit from it and that it would therefore be most unjust to compel B's estate to pay it.

The court decided without hesitation that the estate was liable and must pay the entire claim. This is from decision: "The partnership agreement was offered in evidence, and it appears that under it neither partner could so bind the partnership and it is needless to add that third parties with notice would be barred from making any claim. The auditing judge, however, has found as a fact that the bank had no notice of the contents of the partnership agreement, and hence the agreement cannot be offered in bar of the bank's claim."

Of course it follows, since a partner can borrow money and bind his fellow member, no matter what the partnership agreement says or what arrangement they have made between them, that he can also sign notes and bind the firm. As one case says: "Each partner can also sign the firm

name to negotiable paper and negotiate it. If issued within the partnership scope it is binding on all the partners, even though signed by one of them without the knowledge or without the consent and against the wishes of the co-partner."

You ask then, how can you protect yourself against the making of loans by your partner which might ruin or impair the capital of the partnership or of the individual members? You can't, except in one way, viz., don't take a partner capable of doing such a thing. Even that doesn't always work.—(Copyright, August, 1919, by Elton J. Buckley.)

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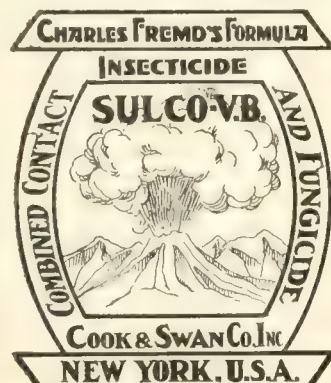
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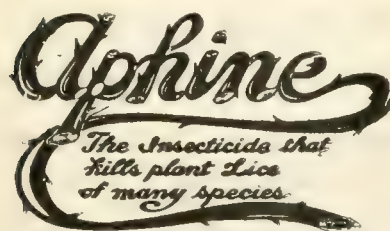
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'RIVERTON' HOSE

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NEWS AND COMMENT

PHILADELPHIA.

October 6 to 11 will be "Flower Week" in Philadelphia so as to open the retail season with pep. All the stores are asked to specially decorate inside and out with plants and flowers during that week. On Monday there will be special gratis offerings sent to the hospitals and on Wednesday a special parade of decorated business wagons. The daily press is to be well taken care of with advertising and reading matter. Chas. H. Grakelow is chairman of the committee having the matter in charge and he is a live wire who knows how to get things done. Everyone in the business is asked to get in line whether members of the Florists' Club or not and help make the affair a big success for the benefit of all.

Howard M. Earl left Detroit on the 8th inst. on a western trip of crop inspection and other business for his principals, the Jerome B. Rice Co., of Cambridge, N. Y.

One of the most attractive features of the parade in honor of the visiting Knights Templar on the 11th, was a beautifully decorated float by the H. F. Michell Co., representing the garden, the farm and the floral world in attractive and artistic shape. Much credit is due to the firm and to the chief designer Philip Freud and his aids, for this good piece of work.

Among the visitors we have had the pleasure of greeting in Philadelphia recently were: W. G. Neilson, Plymouth, Pa.; Gustave Thomas, grower for J. W. Howard, Somerville, Mass.; H. L. Rowe of Mann & Brown, Richmond, Va.; Wm. T. Walker, Salem, Mass.; Chas. Vorkeller, Bethlehem, Pa.; T. Jefferson Groves, Atlantic City, N. J.

LENOX HORTICULTURAL SOCIETY.

The regular monthly meeting of the above society was held in the Town Hall, Lenox, Wednesday evening Sept. 10.

There were two striking exhibits at this meeting. A. N. Cooley, Pittsfield staged a superb table of orchids, including—*Brasso-Cattleya* var *Sedanil*, *C. Fabia gigantea*, *C. Fabia alba*, and *L. C. Alex* (Oliver Lines grower). A. J. Loveless showed a well filled vase of Columbia rose on four foot stems.

Final arrangements were made for staging a comprehensive exhibit of

fruit and vegetables at the Eastern States Exposition Sept. 15-20. The society also plans to stage a similar exhibit at The County Fair to be held at Great Barrington.

Edwin Jenkins gave an interesting talk on his recent motor trip to Canada. Mr. Jenkins visited Niagara, Toronto, Ottawa, Montreal and other places of interest and spoke highly of the bedding seen in the city parks.

INTERNATIONAL FLOWER SHOW.

The first preliminary schedule of the International Flower Show is being sent out and copies may be obtained by writing the Secretary. The show is to be held in Grand Central Palace, N. Y., March 15-21. The following will be in charge:

Flower Show Committee.

T. A. Havemeyer, Chairman; John Young, secretary, 1170 Broadway, New York; Frederic R. Newbold, treasurer; F. R. Pierson, F. R. Newbold, T. A. Havemeyer, George V. Nash, James Stuart, Jos. A. Manda, W. H. Siebrecht, John Canning, Julius Roehrs, F. L. Atkins, John G. Scheepers, Rich. G. Hollaman, C. H. Totty, Frank H. Traendly, W. R. Pierson, G. E. M. Stumpp, John Young, Max Schling, Chas. Schenck, A. L. Miller, P. F. Kessler, W. H. Duckham, P. W. Popp, Arthur Herrington.

Schedule Committee.

C. H. Totty, Chairman, F. R. Pierson, Julius Roehrs, F. L. Atkins, P. W. Popp, W. R. Pierson, John Canning, James Stuart, Joseph A. Manda, Max

Schling, A. L. Miller, W. H. Duckham, John G. Scheepers, Arthur Herrington.

BOSTON DAHLIA SHOW.

It was an excellent Dahlia Show which was staged at Horticultural Hall in Boston, Saturday and Sunday. Few flowers seem to make so popular an appeal as the dahlia and the attendance at the show was large. Most of the well known growers of Greater Boston had an exhibit.

A list of the prizes and gratuities awarded follows:

Awards for Flowers.

Theodore Lyman Fund, No. 2. Dahlias—Show or Fancy, 12 blooms, named varieties: 1st, W. D. Hathaway; 2d, C. Louis Alling. Cactus, 12 blooms; 1st, C. Louis Alling; 2d, Alfred E. Doty. Decorative: 12 blooms: 1st, Ralph W. Clark; 2d, Thomas J. Murphy. Peony-flowered, 12 blooms: 1st, J. K. Alexander; 2d, C. Louis Alling. Pompon, 12 vases, 3 blooms each: 1st, C. Louis Alling; 2d, Alfred E. Doty. One vase, any variety, 6 blooms: 1st, J. E. Jones, President Wilson.

John Allen French Fund. Wild Flowers—Collection of wild flowers and fruits, correctly named, one bottle of each kind: 1st, Mrs. F. C. Upham.

Silver Medal: Fottler, Fiske, Rawson Co., display of Dahlias and Gladioli; J. K. Alexander, display of Dahlias and Gladioli; E. B. Dane, *Sophro-Cattleya Blackii* (*Sophonitis grandiflora* x *Cattleya Trianae*).

Honorable Mention: W. A. Manda, Dahlia Mandaiana; J. K. Alexander, Seedling Peony-flowered Dahlia Lavender Beauty, Seedling Peony-flowered Dahlia Miss Lymina Baxter, Seedling Cactus Dahlia Alice B. Rand, and Seedling Decorative Dahlia Wm. Stark Smith; W. D. Hathaway, display of Dahlias.

Vote of Thanks: Boston Cut Flower Co., display of Dahlias in vases and baskets; Jelle Roos, exhibit of Gladioli; Joseph Breck & Sons Corp., Breck Robinson Nursery Co., Thomas Murphy, and C. Louis Alling, table of Dahlias.

Awards for Vegetables.

Gratuities: Joseph F. Madden, display of vegetables; Mrs. Gordon Abbot, display of vegetables.

CHICAGO.

R. M. Voorhees, sales manager of the Chicago Feed and Fertilizer Co. has returned from an auto trip with his family. He says fertilizer sales to



Michell Float in Philadelphia Parade

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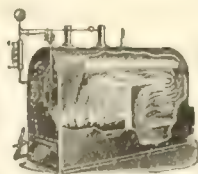
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(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

florists have been exceedingly good for the past six weeks.

Growers of out door stock are finding the summer a very hard one on account of the continued dry weather. Asters are among the plants that are showing it most. In some sections leaves have fallen from the trees till the ground has the appearance of fall. All together the continued drought means the loss of thousands of dollars to the florists.

Norwood Park is a home and flower loving suburb of the Northwest side. Just now the residents are most interested in their gardens which have yielded flowers and vegetables all summer and served a double purpose by also keeping down unsightly weeds. They have an annual exhibit under the care of a garden committee and prizes are awarded by expert judges.

Mr. and Mrs. Philip Schupp have returned from a trip which covered neighboring states.

With the passing of Peter Risch, Chicago loses another of its pioneer flower growers. He was the founder of the firm of Weiland & Risch, whose plants are at Evanston, and whose wholesale store is in the Atlas Block, Chicago. Mr. Risch has kept up his interest in the business, though he has not done much active work for some time, leaving it to his son John P. Risch and his son-in-law Mr. Weiland.

The funeral took place from the residence, 802 Monroe street, Evanston and from St. Nicholas Church on Monday, and interment was at St. Henry's Cemetery.

DEPTH TO PLANT TREES.

The character of the soil and the climate of a region should no doubt govern the depth to which the roots of a fruit tree should be set. For most sections it is generally recommended that the roots be set a little deeper than they stood in the nursery. Very deep planting has been emphasized in the prairie states of the Northwest, where there is danger of root injury

by severe winters. Deep planting is also preferred in the plains where rainfall is very limited and the ground becomes very dry in winter. No doubt the roots should be set deeper in loose, sandy soils than in heavier soils. Most growers of long experience advocate setting a little deeper than the trees stood in the nursery. Many who have had limited experience set their trees much deeper than this, with the idea that the trees will stand straighter and firmer and that the roots are thus secured against dying out.

At the University of Missouri College of Agriculture shallow planting has given better results than deep planting. This point has been tested repeatedly in different years and the results of deep and shallow planting have also been observed in many orchards of the state. The results indicate that a majority of the trees are planted too deep. Deep set roots, especially if spring planted, start growth slowly. The trees usually sway in the wind until a funnel-shaped cavity is formed in the moist soil about the base of the trunk. Borers enter the trunk below ground more readily where such a cavity is formed than in shallow planted trees around which a dust mulch may be retained in close contact with the base of the trunk. Mice find shelter in the soil cavity about a deep-set tree and often girdle it. "Root rot" occurs much more frequently in trees set deep.

If trees are set in autumn they may be set an inch or so deeper than they stood in the nursery. The soil at this season is aired and warmed to a greater depth. New root growth starts, in early winter, on the lower roots which become established for early spring growth. If trees are transplanted in spring they should be set no deeper than they stood in the nursery. If the soil is heavy, spring-set trees should stand a little shallower than they stood in the nursery. In the case of spring-set trees, new root growth starts first on the roots nearest the surface of the soil, which is better

aired and which warms up first.

In order to stand straight and firm, a newly set tree depends largely upon speedy, new root growth to anchor it in the soil.

ANTS IN THE LAWN

Ants in a lawn may be of several species and black or red in color. Their little heaps of dirt are often very unsightly. There are several simple methods of controlling them. Make an opening into their nest with a stick or crowbar and pour in boiling hot water or kerosene. Where the nests cover a large area holes may be made every two feet and about eighteen inches deep. Carbon bisulphide at the rate of four tablespoonfuls to a hole is very effective. The hole should be immediately closed to prevent the escape of the fumes.



IMP SOAP SPRAY
Sure Insect Killer

IMP Soap Spray is a scientifically prepared compound that is destructive to insects without injuring plants or roots. Does not spot leaves, fruit, grass or deface paint work. It is clean and colorless. May be used on fruit trees; shade trees; flowering shrubs; vines; garden truck; and on all sorts of plants, both under glass and out of doors. It is most effective against rose bug; mill bug; white, black, green and rhododendron fly; red spider, thrips; aphids; fruit pests; elm leaf beetle and moths. Used in country's biggest orchards and estates. Very economical, one gallon is mixed with 25 to 40 gallons of water. Full directions on each can. Genuine can has Ivy Leaf trade mark. Your money back if Imp Soap Spray does not do as claimed. Order direct if your dealer cannot supply.

Pint can	\$0.50
Quart can75
Gallon can	2.25
5 Gallon can	10.00
10 Gallon can	18.00

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Mr. P. Ouwerkerk of 216 Jane st., Weehawken, N. J., well known in the trade and possessing many friends, is retiring from business and will soon return to Holland. He had intended to retire before, but the war detained him in this country. "Now", he writes, "with regulation 37 in force, there is no need for me to stay any longer." Mr. Ouwerkerk's new address will be Boskoop, Holland.

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Lecturer on Horticulture, Columbia University

Few practices in the handling of plants, especially fruit bearing plants, attract so much interest as do those of pruning. The methods are so varied, the results so diverse, and the opinions of growers so apparently contradictory that this subject is always one of the most interesting, and the surest to hold attention and arouse discussion.

Particularly during the last ten or fifteen years when the principles of plant physiology have been more and more satisfactorily applied to plant production and management has interest settled in pruning. During the latter half of this time also more and more investigations and tests have been conducted by experiment stations and other workers to test out methods and principles in the interest of science and for the benefit of growers. The accumulation of such new knowledge has become very considerable especially in the last decade, but it is necessarily so scattered that very few growers have access to it, hence the demand for a book, which shall present the really important features of these investigations as well as set forth the fundamental principles based upon the laws of plant growth.

This volume is lavishly illustrated mainly by actual photographs of specimens which show good and bad practices. The author has spared neither time nor expense in gathering his photographs, each one of which tells its story.

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HORTICULTURE PUBLISHING CO.
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HORTICULTURE

Vol. XXX

SEPTEMBER 27, 1919

No. 13

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**Little Ads. That Bring
Big Returns**

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

When writing to Advertisers kindly mention Horticulture

Society of American Florists and Ornamental Horticulturists

A few inquiries are coming along in regard to the billboard which our committees hope to supply very shortly, but there should be many more. Any one, of his own recollection, can point to a score or more sites owned by florists which would furnish grand opportunities for display of bill board signs; and, surely, there are many owners of such sites who would not for a moment scruple to pay the \$50 asked for a sign, especially as such a sign ordered alone would cost about twice as much. The question has been asked whether anything besides the slogan may be painted on the sign. Yes. If a purchaser insists upon it, his name and address may appear on the sign as long as the slogan is left intact and entirely separate. A proper ruling as to this will be made at the meeting of our committee next month. Philip Breitmeyer, at the Detroit Convention, said "Billboards furnish the best way of getting publicity that I know of, and I have worked out the problem for five years or more." On the same occasion, Chairman George Asmus said "Imagine five thousand of these billboards on the principal roads and highways, the railroads and in other places, and what it will mean for our slogan and for our business! An expert on this line told me that we were the most fortunate people in the world—that we had an asset—in these sites—that would cost outsiders hundreds of thousands of dollars to get, as we already had the sites. I want to say that I have 200 orders for these signs right now from the men I have talked to about them." The men Mr. Asmus referred to were mostly located in Cook County, Ill.

Shall Illinois become the prime mover in this most excellent project, when there are as many or more sites available in other states? This question is put to all those florists in other sections who are known to have sites, and whom it is reasonable to suppose would, in their own interests, be willing to use them for this laudable purpose. Our committee would like to hear from these florists without delay,

as arrangements for supply must be completed at the meeting of the committees in Buffalo on October 15th. Just notify your Secretary whether one or more signs could be placed.

Every day now brings warm congratulations on the success of our campaign. The William Roethke Floral Company, Saginaw, Mich., in sending in an additional subscription write "The campaign has helped us, and we cheerfully pay, as business has been better this year than in former years." That is the right spirit—a willingness to pay for benefits received. More particularly is it appreciated when we think of the many who have not yet even sent in a first subscription. Often our personal representatives tell us that when obtaining a subscription a florist will say "Yes, I have been intending all along to subscribe." We do not doubt it, but why should good intentions be prolonged to such a point when it is so easy to sit down, write and mail a cheque. We need the money to carry on the work—without it we must stand still. As W. W. Gamme of London, Ont., said, when he announced at the convention his promise that within two months he would swell the Canadian subscription to the fund with \$1,000 additional, "Just think, the man who subscribes \$10 a year is only giving twenty cents a week. What does that amount to weekly? We throw more than that away in cigars every day—most of us at least. Therefore, you who have not already subscribed, just consider that if you give \$50 a year it only amounts to a dollar weekly."

Why not get in line at once, and contribute whatever you think you can afford—make one, two, or three payments in a year if it suits you better.

JOHN YOUNG, Secy.

1170 Broadway,
New York.

CHRYSANTHEMUM SOCIETY OF AMERICA EXAMINING COM- MITTEES.

President Wm. W. Vert announces the committees to examine new chrysanthemums for the ensuing year as follows:

Boston—Wm. Nicholson (Chairman), James Wheeler, Alex. Montgomery. Ship flowers to chairman, care of W. J. Thurston, Manager, Boston Flower

Exchange, 1 Winthrop Square and Otis street, Boston, Mass.

New York — Eugene Dailedouze (Chairman), Wm. H. Duckham, A. Herrington. Ship flowers to New York Cut Flower Co., 55 Twenty-second street, New York, care of chairman.

Philadelphia — A. B. Cartledge (Chairman), John Westcott, S. S. Pen-nock. Ship flowers to A. B. Cartledge, 1514 Chestnut street, Philadelphia, Pa.

Cincinnati—R. Witterstaetter (Chairman), James Allen, J. C. Murphy. Ship flowers to chairman, Jabez Elliott Flower Market, care of janitor.

Chicago—N. J. Wietor (Chairman), E. A. Kanst, Thomas W. Head. Ship flowers to chairman, 162 North Wabash Ave., Chicago, Ill.

Shipments should be made to arrive by 2 P. M. on examination days to receive attention from the committee. Must be prepaid to destination and an entry fee of \$2.00 should be forwarded to the secretary not later than Tuesday of the week they are to be examined, or it may accompany the blooms.

Seedlings and sports are both eligible to be shown before these committees, provided the raiser has given them two years' trial to determine their true character—not less than six blooms of each variety to be shown. Special attention is called to the rule that sports to receive a certificate must pass at least three of the five committees.

The committees will be in session to examine such exhibits as may be submitted on each Saturday during October and November, the dates of which will be October 4, 11, 18, 25, and November 1, 8, 15, 22, 29.

CHAS. W. JOHNSON, Secy.
2242 W. 109th St.,
Chicago, Illinois.

COMING MEETINGS AND EXHIBI- TIONS.

New Haven, Conn.—New Haven County Hort. Society, annual fall show, Sept. 30 and Oct. 1.

New York City.—The American Institute and the American Dahlia Society, exhibition of dahlias in the Engineering Bldg., 25-33 West 39th St., Sept. 23 to 25. Sec'y, William A. Eagleson, 322-24 West 23rd St.

New York City.—The American Institute and the Chrysanthemum Society of America, exhibition of chrysanthemums in the Engineering Bldg., 25-33 West 39th St., Nov. 5 to 7. Sec'y, William A. Eagleson, 322-24 West 23rd St.

FERNS

		Per 100	Per 1000
BOSTONIA	2 1/4 inch	\$6.00	\$50.00
ROOSEVELTS	"	6.00	50.00
WHITMANI	"	6.50	55.00
WHITMANI COM-			
PACTA	"	6.50	55.00
VERONA	"	6.50	55.00
TEDDY, JR.	"	6.50	55.00

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CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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ADRIAN, MICH.

Snow Queen Canna

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Small, medium and large sizes supplied
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2 Yr. Field Grown Teas and H.T. Roses

Ophelia Maryland Sunburst Prima Donna
Shawyer Pink Cochet White Cochet
and Others

Fine Plants Ready for Shipment in October and Later
\$35.00 Per 100

Macawi: Still a small surplus of this fine fern \$20.00 per 100 for 2 1/2-inch \$1.50 each for specimen plants in 6-inch pots. \$1.25 for same in 5-inch.

Yellow Callas, \$20.00 per 100; White Callas, per 100 \$12.00 and \$20.00

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Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery.

The Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.

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A Hit at the Detroit Convention

NEPHROLEPIS MACAWI

Wavy leafed sport of Scotti.

A vigorous quick grower holding good color.

We are authorized selling agents.

Immediate delivery 2 1/2-inch plants. \$20 per 100. \$200 per 1000.

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FREESIA "PURITY"

Flowers almost twice the size of the regular type, and a pure glistening white.

	Doz.	100	1000
First Size Bulbs.....	.20	\$1.25	\$10.00

NEW GIANT COLORED FREESIAS

These varieties are equal to the "Purity" in size; have excellent form and splendid texture.

	Doz.	100	1000
BLUE	\$1.25	\$8.00	\$75.00
LAVENDER	1.25	8.00	75.00
PINK	1.25	8.00	75.00
MIXED. All colors..	.75	5.00	40.00

NARCISSUS, PAPER WHITE GRANDIFLORA

First Size, 13 ctm up (1250 bulbs to case), Per doz., 40c.; \$2.50 per 100; per 1000, \$21.00.

ALSO HYACINTHS, TULIPS, NARCISSUS, CALLAS AND OTHER SEASONABLE BULBS.

Also Seasonable Seeds and Supplies.

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SEEDS AND BULBS Boddington's

128 Chambers St., N. Y. City

HORTICULTURE

Vol. XXX

SEPTEMBER 27, 1919

No. 13

THE TALK OF THE TRADE

It is apparent that there will be a big supply of cyclamens this year, although that does not mean that there will be an over supply. The stock on hand is larger than that of many other plants and the quality is remarkably good. There is one section just on the outskirts of Boston where several large growers specialize on cyclamens and it is safe to say that the stock now being grown is ahead of anything seen for several years. Among the growers are Frank Edgar and the William W. Edgar Company of Waverly, Walrath and Sons of Waltham and A. M. Davenport of Watertown. To the casual visitor it looks as though there was some rivalry among these men to see which can grow the biggest plants. At any event some of the specimens to be seen are of phenomenal size. Several of them would pretty nearly fill a bushel basket, and by several I mean perhaps forty or fifty at one place. Of course the plants are not in flower, but they are carrying a tremendous crop of buds. In other parts of the country the cyclamen is also being raised in large numbers this season and promises to cut as much figure in the market as any pot plant.

As to Lilies.

Earlier in the season it was expected that lily prices would be exceedingly high and many growers became discouraged at the prospect. Prices are bound to be high, of course, but there is reason to believe that they will be lower than was anticipated. In fact, they may go as low as \$150 a thousand. The first arrivals are expected about the first of October and much interest is being felt as to the quality. The calla is going to remain a good seller this year, from all indications. At least, a good sized stock is being accumulated.

Araucarias Short.

There is no question about araucarias being very short in supply. It would be difficult to locate many plants anyway. I must take exception, however, to George Watson's statement last week that a Philadelphia concern had about all there were, or

something to that effect. I learn that Louis Schmutz of Brooklyn also has a fair supply.

From Peas to Carnations.

It will be news to many growers that William Sim of Cliftondale, Mass. is no longer to be rated as the Sweet Pea King. I note that several of the florist papers have been printing articles about the way in which Mr. Sims grows sweet peas, and yet the truth of the matter is that he has practically no sweet peas in his houses at the present time. Indeed, Mr. Sim seems to be out now to make a reputation as a carnation grower and from present indications he will succeed, for he has some of the best stock to be seen in New England. That he has gone into carnations in rather a large way may be judged from the fact that he has about 100,000 plants. He is giving White Delight, among others, a good try out. He also has a number of promising seedlings. One reason for Mr. Sim's success this year no doubt lies in the good beginning he made. He had half of his stock housed by the first of June and he began cutting the middle of August.

While Mr. Sim is going in heavily for carnations, he is not ignoring other stock, by any means. He is raising a large lot of violets, although less than in former years, and he has a fine house of primroses.

Sim's Polyanthus.

Sim's Yellow Polyanthus has made a splendid impression and the demand continues to grow. Indeed, this promises to be one of the best pot plants of the season. Moreover, the flowers are excellent for cutting, being handled like violets. No doubt there are readers of this article who will remember the unique corsage which Mr. Sim exhibited at one of the shows and which was made from these flowers. The call is extending to the west, too. One florist from that section has sent in an order for 3,000 field grown plants which will bloom this winter. This comes after an order for a thousand plants last season.

Perhaps it would be well to say that the call for purple primroses which was predicted does not seem to have

developed. At any rate Mr. Sim has thrown out all but the yellows and the tans, saying that the others do not sell. It sometimes happens that florists who take up this plant for the first time do not know how to handle them. All too often they keep them in hot houses when the weather begins to get warm in the Spring. This is all a mistake. The plants should be set in the field as soon as possible and kept there until the coming of frosts.

Even then they will not look very thrifty for a while if there happens to be a spell of dry weather early in the summer, but the Fall rains will usually bring them along all right and put them into good condition by the time they should be taken in.

A Good Fern.

There seems to be no doubt about the fine quality of *Nephrolepis Macawi* now being offered the trade. Here is a fern which should prove a splendid seller, for it has all the merits which make a popular appeal. It is a sport of Scotti, with wavy leaves, and grows faster than Scotti. Indeed, it is undoubtedly the fastest grown commercial fern on the market. In developing this fern Duncan Macaw has added to a reputation which was already one to be proud of. Of course the fern is selling well—both East and West.

A TRAVELING SALESMAN.

LANCASTER COUNTY FLORISTS' ASSOCIATION

About 6 P. M. on Thursday, September 18, Leola became the center of attraction for the florists of this vicinity and they gravitated toward it via trolley and machine until there were about twenty of us on hand.

Our host, W. B. Girvin, and his efficient manager, John Shoenberger, piloted us around the place. The first inspection was an immense plot of candytuft grown for summer cutting. Next came the chrysanthemum house planted to pompons and standards all of them in good shape excepting one batch of Chadwick which was badly used up by the "midge." Next were the carnations, of which only three varieties are grown, Supreme, Matchless and Mrs. C. W. Ward. They were uniformly good and producing flowers. One peculiar thing I noted was that

PAPER WHITE GRAND.

IMMEDIATE SHIPMENT

Paper Whites,	12-15 cm., 1250 per case.....	\$16.50 per 1000
"	13-15 cm., 1250 "	18.00 "
"	14-16 cm., 1000 "	21.00 "

(The 14-16 sold only with fair proportion of 13-15 or 12-15 cm.)

OCTOBER SHIPMENT

Narcissus Emperor,	double nosed.....	\$36.00 per 1000
" Empress	"	36.00 "

In lots of 10,000 or more \$35.00 per 1000.

These are home grown bulbs, selected XXX for forcing.

Prices are packed and F. O. B. New York. Cash with order, less 2% from those not having established credit with us.

Also for prompt shipment: **Bay Trees, Paeonies, Raffia, Bamboo Canes.** For later shipment: **Dutch Bulbs, Jap. Lily Bulbs, Begonias and Gloxinias, Valley Pips, Palm Seeds, etc.**

Write for prices specifically stating requirements

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THE IMPORT HOUSE

a batch of Mrs. Ward grown inside all summer were not as good as those brought in from the field. Usually it is the other way round. On the side beds were Freesia and Godfrey lilies.

This is the only place in the country where roses are grown as a shipping proposition and they are well grown, Kaiserin and White Killarney as a summer blooming proposition, with Ophelia and Columbia as winter bloomers. The area devoted to roses will be gradually increased and I predict that eventually the place will grow nothing but roses.

Mr. Girvin is one of Lancaster's model farmers and the acreage of crops, tobacco and cereals runs into the three figures. Instead of running a dairy he feeds a bunch of steers each winter and thus gets plenty of good feeding material for his roses, the roses are fat and healthy all winter and by spring the steers are a picture for lovers of good stock.

The meeting was called at 7.30 on the porch. After the regular routine of business the first matter taken up was a proposed trip to the Dahlia Show at Vincent's, White Marsh, Md. Those having machines were asked to invite their more unfortunate fellows along with them and all to meet at the Chamber of Commerce rooms in Lancaster

at 7 A. M. sharp, from which point the run will be made and it was announced on a card being sent out that there would be no waiting even for five minutes for anyone not on hand at that time.

Convention matters were discussed by Messrs. Harry K. Rohrer, Ira Landis and the writer, everyone praising the convention and condemning the hotel of magnificent promises and broken pledges.

Mr. B. M. Wise of the Excello Mfg. Co., Cleveland, Ohio, was the one visitor and gave a very pressing invitation to the members to come to Cleveland next summer, assuring us of good hotels and plenty of diversion along with our business propositions.

Flower show matters were discussed and it was decided that we would not attempt anything along this line for Presidential year, as former experience taught us that it was a bad year for shows.

President Weaver spoke of a trip to Allentown, which he found more of a flower loving city than Lancaster, but most of the flowers were Asters. One feature that attracted him was the floral basins erected around each light standard of the city and planted and taken care of by the park men. He thought we ought to get busy and

try and have this worked out in Lancaster.

Mr. Robert Pyle of West Grove has invited the Club to make one of their fall or winter automobile runs to the Conard & Jones place when he will have some of the Chester County men to meet with us and have a regular visitation over the country. This will be taken up at the next meeting of the Club, which will be at the Chamber of Commerce Rooms, Oct. 16th, and take the form of a social.

ALBERT M. HERR.

DO YOU ADVERTISE?

It may be that you are not a regular advertiser in HORTICULTURE, but that you would profit by being an occasional advertiser. It often happens that a grower has a few superfluous seedlings, cuttings or young plants for which he would like to find a market. It is quite probable that someone, somewhere, may be looking for just that kind of material. HORTICULTURE is the right medium for bringing together the two people who would be interested in such a deal. Our rates are so moderate that no one has an excuse on that account for not advertising. Why not try out the plan even in a small way now?

George Watson's Corner

"You in your little corner and I in mine."

Following up my notes of last week on noteworthy early flowering dahlias to be seen now at the Dreer Nurseries at Riverton, N. J. make special star marks on a few more. These are not yet in commerce to any extent but are all in the front ranks and look like winners for popular esteem:

Henry R. Wirth: Bright red cactus.

Mme. Eschenauer: Refined white and pink cactus.

Fernand Olivet. Mahogany-red cactus.

Mme. A. Lumier: Decorative, white and pink.

George Walker: Immense giant cactus, salmon-fawn and pink.

Frau Geheimrath Scheiff: Extra fine bronze hybrid-cactus.

Epoch: Large deep carmine giant cactus.

Fantasie: Unique salmon-pink cactus.

Kaiserin Augusta: White decorative.

Joseph Roches: Crimson-carmine cactus.

Marquis de Pomsck. Bronze foliage, deep mahogany cactus.

Nerissa: Clean rose pompon.

Mr. E. H. Michel, the Dreer dahlia enthusiast and the writer, have had many friendly bouts over Finnan Haddies and St. Louie Sculpins and things like that but I deny ever having spelled his name with a "k." That unforgivable insult was perpetuated by an insect in Boston called a printer, and that he was not promptly swatted and annihilated by the proof-reader brings the latter also before the bat of judgment. The sentence is that the printer be hung but that the other be let off this time as he was doubtless not himself on account of the police strike and the doings around Scollay Square. But if he sin again—"Faugh a Ballagh."

I asked Edwin J. Fancourt for his picture the other day. Said he hadn't had one "took" for at least 20 years. That's just like lots of our live business men—they are so ultra modest. But he was quite willing to hand us a picture of two of his youngsters; Helen, aged seven, and Edwin, aged three. Evidently he considers them of far more importance than their papa. Maybe we would also if we had

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Try these. **Chinese Joss Lilies** Grow in gravel and water
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Complete Autumn Catalogue Now Ready. Ask for it.

43 Barclay St.
New York City

VAUGHAN'S SEED STORE

33 W. Randolph St.
Chicago, Ill.

walked the parlor with them nights as often as he has. Anyhow, they are nice looking youngsters and I pass them along to the lime light. When they grow old enough they'll realize they have high ideals to live up to to make good on all the fond hopes of their parents.



No Wonder Mr. Fancourt is Proud of Them

Among the roses now coming to the cut flower market the Columbia is holding front rank. The growers have been very successful with it and are sending in some splendid cuts. Premier and Russell are a bit off crop for the time being, but American Beauty is beginning to show up again in better shape. The dahlia market has opened up in good form and there are ample supplies of fine flowers. Asters are not so plentiful and really fine flowers may be put on the scarce side and bring good money. Carnations are beginning to show up again but are not yet much of a feature. The earlier flowering chrysanthemums have made their appearance and add variety to the daily offerings. Tritomas are plentiful and are popular in decorative work where autumn effects

are desired. The same may be said of hydrangea heads which have now assumed their deep and pleasing fall shadings. Cosmos, eupatorium, statice and delphinium are in good supply and there are also plenty of such items as tuberoses, rubrum lilies, cockscombs and snapdragons.

Frank M. Gaul of the Ross Flower Store is receiving congratulations as the originator of the happy idea of presenting General Pershing with an armful of Columbia roses from the florists of Philadelphia on the day of the Pershing parade, Sept. 12th. With the Philadelphia boys Gaul and Grakelow and Habermehl and Pennock and Fancourt and many others working on that and other features of "Say it with Flowers" that day, the Parkway was a gay scene and the applause over the event came from a hundred thousand spectators. Marie Auegle and Hazel Matthews, the youngsters who presented the roses to the general, will cherish the Pershing kiss fragrant in their memories as the morning dew, as long as memory lasts. They will probably be bragging about it fifty years from now—like a celebrated Mayor of Philadelphia of fifty years ago used to preen himself of having danced with Queen Victoria when he was a member of the American Legation in London. That was Mayor Vaux, and he was a familiar figure on Chestnut street when I came to Philadelphia thirty-one years ago. And he was some Beau Brummel—believe me. William Burns Smith, who came later, may have been a "Dandy Mayor," but he wasn't in it for "get up" with Mayor Vaux.

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LAGER & HURRELL, Summit, N. J.

HORTICULTURE

Established by William J. Stewart in 1904

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SEPTEMBER 27, 1919

NO. 13

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EDWARD I. FARRINGTON, Editor.
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Winter prospects

It seems to be generally agreed that the prospects for fall and winter business are excellent. One thing is certain, business has opened up two or three weeks earlier than usual, which augurs well for the season's trade. Then, too, the class of plants being supplied to the trade is of unusual excellence. This is the unanimous report of men who have traveled through New England, and the same seems to be true in New York and further West. Plant material has come along well, has been grown with care in spite of difficult labor conditions and promises to be marketed in first class shape. Perhaps all this is to be accounted for in part by the fact that growers have been more inclined to give special attention to the line of stock which they are most skilled in growing. Specializing always results in improved quality. It is interesting to find that Canadian florists are now talking about the azaleas, palms and the like which are on their way to Canada from Europe. It certainly makes the trade in the States feel like going right up in the air and howling. After all, though, that doesn't do any good, as experience has shown. Probably it will be more sensible to adopt Congressman Davey's plan as outlined in *HORTICULTURE* last week. We can't help thinking, though, about Mr. Manda's experience when he took some of his choice plants across the line and couldn't get them back again. Then we feel like howling again. But what's the use. And after all, the end is not yet, not if we know anything about the florists and nurserymen of this country.

The F. T. D. In Canada

It is interesting to read in the Canadian Florist that the Florists' Telegraph Delivery Association is taking on a new lease of life across the border. There is need of greater expansion as well as greater activity there and members of the association in the United States will be glad to see a further awakening. They have come to realize the great advantages offered by the association and are fully persuaded that the Canadian florists have just as much to gain through their support of the organization. Florists on both sides of the line can and should work together for mutual help and progress. There are well over a thousand members of the association on this continent at the present time and it is stated that the number is being added to at the rate of

about thirty a month. The membership is spread over at least 700 towns and cities all the way from the Atlantic to the Pacific. Revised lists are being continually sent out so that they are always up to date.

The association is not solely for city florists, as some seem to think. Indeed, the advantages derived by the florist in the small towns are sometimes greater than those of his brother members in the larger places. It means much to a small town florist to have his name and his location brought regularly and prominently to the attention of other florists the country over and in Canada, too. This sort of thing is bound to bring business. Sending flowers by telegraph is a rapidly growing custom and is being fostered in many ways. It is the florist in each town whose name is on the list that is going to get the business as fast as it develops. And the very fact that his name is on the list often helps to create business.

New York Horticultural Hall

The movement for a horticultural building in New York is again being agitated and in a way which seems likely to bring results. The New York Horticultural Society would of course like such a building, with a good hall, and so would the many other societies which meet in New York City. There should be some place where the activities of florists, gardeners and those in allied lines can be co-ordinated and brought under one roof. New York needs an institution similar to Horticultural Hall in Boston, which has become one of the city's landmarks. So, for that matter, do all of the larger cities of the country. It is true that building costs are extremely high just now, but it is also true that keen interest is being shown in all horticultural matters and that people seem inclined to support projects of this kind.

In this connection a word may be in order about the shows which bring such institutions to the attention of the general public and help increase the membership as well as contributions. For some reason there seems to have been a falling off in interest on the part of large estate owners, the men and women with large gardens and with greenhouse ranges who have it in their power to make any show worth visiting because of the quality and extent of the exhibits. Of course much of the responsibility may be placed on the war. Stocks in private houses are still low. There may be no chrysanthemum show in Philadelphia this fall for that very reason. There are other factors to be considered, though, and it is to be hoped that more of the old time spirit of rivalry will develop the coming year. Even if the head gardener or superintendent is encouraged to make an exhibit, much will be accomplished. If the owner, however, fails to show any interest, it is difficult to awaken the enthusiasm of the gardener. It is right here that the question of prize money comes in. With owners co-operating and taking an active interest, the situation would be quite different than when the whole thing is put up to the gardener. The work of staging a good exhibit requires long preparation, many extra hours and sometimes expense out of the gardener's own pocket. Under such conditions he feels that some tangible reward is reasonable to expect. On the other hand, there is a certain feeling in some quarters that the chief end and aim of the gardener is to acquire a little more filthy lucre. It is a question and a situation which demands a more general getting together, but it is unthinkable that the trend of the times should be away from horticultural interests or from the giving of such exhibits as bring joy and keen satisfaction to those who show and those who come to see what is shown.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

At a recent meeting of the Gardeners' and Florists' Club of Boston, W. N. Craig, the efficient secretary, exhibited a vase of *Artemisia lactiflora* which aroused considerable interest, as it was not recognized by many of those present. This plant is one of E. H. Wilson's Chinese introductions and recently Mr. Wilson told me how he happened to obtain it. It seems that in China the plant grows wild and is a great plague of the farmer, occupying a place somewhat similar to the daisy in this country. Mr. Wilson had gathered a few plants and when he was

packing a box of material for shipment to England he came across them. He considered them of almost no value and for a time it was a toss-up whether they should go into the box or into the river close at hand. When the packing had been completed, however, a little space remained and into the box the plants of *Artemisia lactiflora* went. When Mr. Wilson returned to England later and found the plants flowering, he was amazed, for they were very much larger and handsomer than in their native land. It was simply a case where cultivation had brought about a great improvement,

literally transforming a weed of the fields into a most desirable garden subject. The plant was propagated by the Veitches and sent by them to the United States. Fortunately no such blind exclusion ruling as Quarantine No. 37 was in force at that time, or otherwise it might never have been known here.

Artemisia lactiflora is especially valuable because blooming at the end of the season. It has a feathery-cream-white blossom that bears a marked resemblance to the astilbes or florist's spiraea, and the blooms make attractive cut flowers which last well. The plant while thriving reasonably well in any flower border, has a liking for spots which are rather moist and the soil must be rich in order to produce good blooms. The fact must be admitted, too, that it has a tendency to



Flowers of *Artemisia Lactiflora*

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occasionally disappear like the auratum lily, a fact which militates against its popularity among amateurs. Although not widely grown as yet, plants of *Artemisia lactiflora* are occasionally stumbled upon unexpectedly. Mr. Wilson tells me that only recently he happened to be in a garden in a suburban town, where he found a well established and vigorous clump which was blooming nicely.

I cannot help wondering how J. Horace McFarland, editor of the *Rose Annual*, is going to view the project of the Society of American Florists to put up billboards all over the country for advertising flowers and the society's slogan "Say It With Flowers." As is well known, Mr. McFarland is president of the American Civic Association—has been, in fact, for many years—and opposition to billboards and other kinds of roadside advertising has been made a powerful feature of this organization's work. Mr. McFarland himself has inveighed against the billboard all up and down the country, if I am not mistaken. Perhaps he will have something rather definite to say about this matter after a time. At any rate, it is certain to be definite if he speaks at all, for he has a command of words second to few men in the country, one reason, no doubt, why he is in demand as a lecturer and why he is an especially valuable man to have in charge of the *Rose Society's* publication.

The remarks which I made recently about certain of the spring catalogues should be extended to include some of those issued this fall. That of the

Cromwell Gardens at Cromwell, Conn., is one to receive special mention. While conventional in form and by no means pretentious, its illustrations in color are wonderfully good and almost certainly ensure that it will be kept for future reference. The full page frontispiece of *Iris Kharput* is a gem. So, for that matter, is the smaller illustration of *Iris Purple King*. There is an excellent picture in color of the hardy climbing rose called *Rosiere*, which is considered an improvement of *Thousand Beauties* (*Tausendschon* before the war) and a popular favorite.

Peter Henderson & Co., of New York are also putting out a catalogue with colored illustrations which makes a favorable impression. The coloring of the red and pink flowers is much less delicate, however, than in the Cromwell catalogue. In fact, it is a question whether it would not have been wise to omit the cuts of early tulips unless more satisfactory effects could be obtained. The illustrations of *Narcissi* on the other hand are charming and almost certain to bring orders.

There are tremendous possibilities in the use of colored plates, but enterprise will do well to wait on caution when the subject is particularly difficult or when the printer's execution is not to the mark. Good colored illustrations will draw trade; poor illustrations will repel it.

Incidentally, it is interesting to note the different way in which the nurserymen regard color. In his Cromwell Gardens catalogue Mr. Pierson puts all the color inside, the cover illustrations being in black and white. The Henderson people have color both inside and out, with a fine Dutch conception to first catch the eye. The Conard & Jones Co., reverses the Pierson plan by using plenty of color on the covers and none inside. They are using *American Pillar* and *Dr. Van Fleet* roses on the front cover, creating something of a problem for the

printer, but one which he has met successfully.

And by the way, I wish that the catalogue makers would use cuts of the newer flowers so far as possible. We all know what the old time favorites look like, but we are keen to have a glimpse at the newer sorts. Yet we find the most commonplace varieties pictured in many catalogues, sometimes very conspicuously. Isn't there an opportunity for improvement here?

SPHAGNUM MOSS.

These plants, for there are many species of sphagnum, grow best in a climate that is moist and only moderately warm in summer. They are one of the chief forms of vegetation found growing in the swampy regions known as "muskegs," and occur principally in Newfoundland, the Maritime Provinces, North-eastern Quebec, Labrador, and the western parts of British Columbia.

The sphagnum plant consists of a stem and branches, which are clothed with small, numerous overlapping leaves. They differ from most other mosses, in being entirely devoid of rootlets. Another peculiarity of sphagnum is that the leaf never has a central vein or mid-rib. The outer part of the stem, as well as a considerable part of the leaf, is composed of a large number of special "absorbent cells" which are able to take up and hold water like a sponge. The amount of water absorbed varies according to the species, but ranges from ten to twenty times the weight of the dry sphagnum. Owing to the ability of these cells to absorb the water required by the plant for its development, the presence of rootlets is unnecessary.

Sphagnum or bog moss has been used for a considerable period as a packing material for plants. Owing to its power of retaining moisture, it helps to keep them in a fresh condition until they arrive at their destination.

THE GARDENER'S SECTION

TESTING TABLE CORN.

Mr. Rollins Outlines His Methods.

Dear Sir: For many years intelligent agriculturists have tried to improve their Indian corn by selecting the best ears at the time of husking for seed.

The most important step taken was when all the kernels of a single ear were planted in one row, and from this row the best plants were selected for producing the seed.

I adopted this improvement when it was first advocated, but have now abandoned it because it took a long time to purify the strains because of the constant cross fertilization.

Some other grains like wheat and rye are close pollinated, and but little subject to cross fertilization.

With these the starting point for a new strain is the examination of as many fields as are within reach, selecting and marking the plants that seem superior and breeding from these; planting the seed of each ear separately. In the next generation the seed is pure.

All that can be done to improve it is choose each year the best plants for seed to keep the race at its maximum. The reason for this is that every pure race fluctuates about a mean.

With corn the next generation after the initial selection is not pure, owing to the first selected ears having been cross pollinated and by more than one of the neighboring plants.

Consequently the period of purification is much longer than with the small grains, and with sweet corn, the kind in which we gardeners are interested, and where we try to combine all the good qualities of the several strains we have purified, the work goes on slowly.

I have therefore definitely abandoned this single row method. To quote from a song of Harry Lauder's—"that may have been quite all right fifty years ago but it doesn't suit me." Instead of planting the kernels of the selected ears each in a row, thus subjecting them to cross fertilization, I pick out the finest kernels from each of the selected ears and plant those from each ear separately in a small clearing in the forest where the trees protect them from stray pollen. Just before the male flowers open the most

promising plant is saved and the others detasseled.

Evidently here the chosen plant must be close pollinated as no pollen except its own can reach it.

Corn literature is full of warnings against close pollination and you have no doubt seen illustrations showing how stunted the plants become. Disregard all this and self pollinate for at least one generation, for the small loss of vitality thus produced is of no practical moment compared with the saving of time in the production of pure strains. Moreover the vigor soon comes back.

Of course we gardeners are chiefly interested in sweetness and flavor and these cannot be judged at the time of detasseling. The points that can be judged are, color of the plant, size, short or long stalks, upright or drooping ears, absence of suckers, early appearance of the male flowers; if any of the seeds produce plants that are barren, then that whole lot should be destroyed and another start made.

This barren condition in a strain is a most serious matter, but more especially in field corn. In a table corn that had other good qualities in a maximum degree a small percent of barren plants might be tolerated, but really it would be better to select a new starting point.

In my first letter to you on breeding sweet corn, which was published in *HORTICULTURE*, I recommended testing for sweetness and flavor each ear in the patch when the corn was in the milk, stripping back the husk for this purpose. Side by side with this method I was testing another, because in a wet season the procedure allowed fungi to enter. I now wait until the plants have lost their fresh green and the tips of the husks look a little dry. Then I gather the whole crop. The kernels are full grown, but still soft and the testing can be done quickly, the corn then being dried in a warm place. Take a bite from the tip and base of each ear. I now know that corn gathered in this stage, when we can judge the sweetness and flavor germinates well if properly dried and recommend this method. Tea and coffee "tasters" soon ruin their health, but you can become a corn "taster" without risk if you do so before it is distilled.

I find that the corn which longest retains its sweetness is best, as the flavor improves, and a well filled ear

contains more nourishment than one where the gathering must take place while the kernels are small, to ensure its being in the right state for the table.

I have found that there are other seeds which will germinate well if gathered when still soft. For five years I have planted all my hybrid iris seed when in that condition.

For some years I have bred corn in rich and radioactive soil to try to make it "sport" and had intended to send you photographs of some of the interesting freaks that have appeared. I will do this in my next letter.

Sincerely

WILLIAM ROLLINS.

CHANGES AMONG THE GARDENERS.

J. H. Francis, formerly superintendent of the estate of A. B. Dick at Lake Forest, Ill., has taken charge of the F. F. Drury place at Cleveland, Ohio.

Edward Trethewey, formerly on the Crane place at Ipswich, of which Robert Cameron has taken charge, is now superintendent of the E. H. Fitch estate at Romford, Conn. After leaving the Crane estate he served in the Canadian army.

John F. Proctor, who for seven years was head gardener on the Vincent Astor estate, Rhinebeck, N. Y., has accepted the position of general manager of the B. B. M. Carpenter properties in and near Wilmington, Del., comprising the home grounds and two farms.

William Robertson, late of the Pepper estate, Jenkintown, Pa., has accepted the position of superintendent of the George McFadden estate, Villa Nova, Pa.

H. H. Hundt, for the past year foreman of grounds at "Greystone," Yonkers, N. Y., has taken the position of head gardener to H. L. Thompson, Perrysburg, Ohio, succeeding James Neil, who recently resigned.

TWIG PRUNERS.

Usually the first evidence of the twig pruners is the fallen twigs on the ground which upon examination may reveal a small white borer or the end of the twig may show the characteristic inside girdling. Right now, however, proof of the twig pruner's presence is becoming evident and it is important that everyone become acquainted with this first evidence.

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When an oak tree or in fact almost any other tree, maple, hickory, etc., shows a few dead leaves, two, three, or four, out on the ends of the branches, cut off this little twig and examine it closely. The base of the leaf petiole may be of a very dark brown color, this is where the borer started at the axil of the leaf. Cut into the twig carefully at the base of the leaf and follow the dead bark around the twig and downward. You may not be able to find the young borer for they are very small, maybe one-twelfth of an inch in length. Sometimes the dead twigs will be very conspicuous and unsightly and then again there may be only a few scattered over the tree. Remove these small twigs taking off perhaps a foot of the branch, burn them and there will be no further trouble.

The adult twig pruner, a long horn beetle, is supposed to be out from July to September, so the size of the borers will vary according to the time when the eggs are laid. Sometimes one egg is laid in a twig and sometimes there are two or more.

By fall the borer is nearly mature and it then starts girdling the inside of the twig so it will fall to the ground. After eating away all but a thin layer of wood or bark the borer goes back up the twig plugging the tunnel behind him. If the borer has calculated right the next high wind will break off the twig. These twigs may vary in length from a foot or two to five or ten feet although ten feet is probably unusual.

There have been a number of theories as to why the insect wants to cut the twig and spend the winter on the ground. It may be the desire for moisture although the insects will come out from a dry twig. It may be easier for the adult to come out through the plugged tunnel at the cut-off end. At any rate the final changes are made while the twig is on the ground, and winter being passed either as a larva or pupa.

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ORIGIN OF PRIMULINUS HYBRIDS.

Gladiolus lovers in this country (and they are legion) will be interested in the following account of the origin of the Primulinus Hybrids which appeared in the Gardeners' Chronicle of England:

It may be desirable to place on record, before they are forgotten, the facts connected with the origin of the primulinus group of Gladioli, as it comprises some of the most beautiful and decorative flowers at present grown.

During the construction of the important railway bridge across the gorge of the Zambesi, in Rhodesia—of which Sir Charles Metcalfe, Bart., and Sir Douglas Fox and Partners were the engineers—the resident engineer, Mr. S. F. Townsend, found certain flowers, which were growing under the spray of the Victoria Falls, and which seemed to thrive notwithstanding the deluge of water which very soon soaked the discoverer to the skin during his efforts to obtain them.

Being a gardener, Mr. Townsend kindly sent, in 1902, four corms, by post, to me, but not knowing what they were, he was unable to give any clue as to the treatment they required. As, however, they came from Central Africa, and were therefore accustomed to heat, and to almost continual moisture from the Victoria Falls, my head gardener, Mr. John Richards, and I decided that we would afford them a high temperature and wet treatment.

On December 1, 1903, we were rewarded by the appearance of three or four spikes of bloom of a delicate and beautiful form, with leaves very similar to those of Montbretia, the plants standing about two feet in height. The flowers were of a rich, butter yel-

low, self colored, with five petals, the centre petal of which was bent down or depressed, forming a hood over the pistil and stamens and thus protecting the pollen from falling spray. It was evidently due to this peculiarity, and provision of such a remarkable character, that the plant thrived and increased under apparently most unpromising conditions.

Some of the corms were then sent, not only to Kew, but to the Physic Garden at Chelsea, to the Botanical Gardens at Cambridge and Edinburgh, as well as to growers of Gladioli, such as Messrs. J. Kelway and Son, and R. Wallace and Co., in England; to Groff, of Simcoe, Canada; and also to Holland, Belgium, and the United States, as it was felt that it would be in the interests of horticulture and all flower-loving people that the widest publicity should be given this plant.

Attempts were made at once to hybridise the plant, crossing it with Gladiolus gandavensis and others, and in about three years some of the most beautiful plants resulted, the flowers ranging from pure white to butter yellow, with rich carmine, reds, browns, and cream tints, and others with yellow segments streaked with red. The interesting fact that the hooded petal is retained, and that the lovely yellow of the African plant is the predominant color, add greatly to the beauty of the flowers.

The vigor and physique of the English varieties were imparted to the following generations, with the result that certain plants have grown to a height of 8 feet.

For decorative purposes, I know of nothing to surpass these new additions to our flower garden; a few spikes in a suitable vase, placed in the centre of a table, with electric light falling on

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The House for Quality and Service

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them, form an exquisite picture, and fully corroborates Sir William Dyer's prediction that *G. Primulinus* would prove the commencement of an entirely new family of *Gladioli*.

From the above it will be seen that a period of seventeen years has elapsed from the date of discovery.—*Francis For.*

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1,312,188. Wheeled Plow. A. C. Lindgren, Moline, Ill., assignor, by mesne assignments, to International Harvester Co., a corporation of New Jersey.

1,312,281. Gang Plow. Wm. N. Springer, Peoria, Ill., assignor to Avery Company, Peoria, Ill., a corporation of Illinois.

1,312,342. Hay Loader. Edward Mowry, Sterling, Ill., assignor, by mesne assignments, to International Harvester Co., a corporation of Illinois.

1,312,418. Cultivator. Otto Mueller, Elkton, Fla.

1,313,595. Fertilizer-Distributor. Sherman C. Hartsock, Moline, Ill., assignor to D. M. Sechler Implement

& Carriage Company, Moline, Ill., a corporation of Illinois.

1,313,611. Plow Attachment. John Stirling, Grabow, La.

1,313,802. Yielding Mount for Plows and Other Tools. Elon Dunlop, Diamond Springs, Cal.

1,312,984. Potato Picker Mechanism for Potato Planters. Wm. A. Hendrickson, Riverton, N. J., assignor to McWhorter Mfg. Co., Riverton, N. J., a corporation of New Jersey.

1,313,008. Harrow. Lars E. Oakes, Elk Point, S. D.

1,313,116. Marking Machine. Johansen Gerard Frederick Rooker Vrijenban, near Delft, Netherlands.

1,313,144. Harrow and Attachment therefor. Harry M. Weitzell, LeGrand, Iowa.

1,313,194. Plow. Robert L. Kirkpatrick, Hempstead, Texas.

1,313,200. Garden-Tool. Herbert C. Mundy & Edith Harrison Lee, Los Angeles, Calif.

1,313,242. Cultivator. John F. Ashley, Dallas, Texas.

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Please mention Horticulture when writing.

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Metal Designs, Baskets, Wire Work & Novelties and are dealers in Decorative Glassware, Growers and Florists' Requisites

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Fresh Cut Decorative Evergreens.

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CLUSTERS OF APHIS EGGS
HANG OVER FUNGUS SPORES OF THE
BROWN ROT OF THE PEACH AND
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Destroy the above named insects and fungus spores by spraying them with

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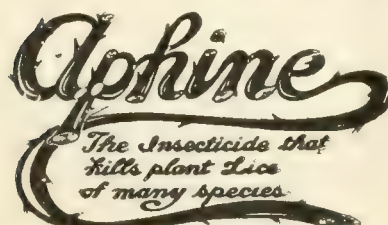
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A spray remedy for green, black, white & thrips and soft scale.
Quart, \$1.00; Gallon, \$2.50.

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For mildew, rust and other blights affecting flowers, fruits and vegetables.
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For eel worms, angle worms and other worms working in the soil.
Quart, \$1.00; Gallon, \$2.50.
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Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to direction, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

½ Pint, 80c.; Pint, 50c.; Quart, 90c.; ½ Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.90; 10 Gallon Can, \$20.00. Directions on package.

LEMON OIL COMPANY

Dept. S. 428 W. Lexington St., Baltimore, Md.

HARDY NATIVE FERNS.

Probably nobody in America is more competent to discuss the native ferns than Mr. Edward Gillett of Southwick, Mass., who has spent many years studying, propagating and growing ferns. Mr. Gillett has now issued a highly interesting little booklet which is devoted to native ferns and flowers, not only describing them, but giving useful information about their uses and cultivation. A few paragraphs are given below:

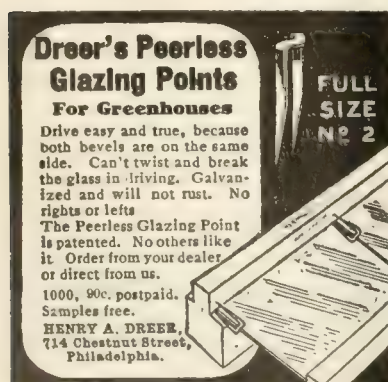
Ferns as a rule are easily grown yet there are varieties which require special care. Ordinary garden soil to which a liberal application of well-rotted horse manure has been added furnishes a very good soil condition for some of the ranker growing varieties. The smaller growing varieties which comprises those that can be classed as rock ferns, require very rich soil. When found growing wild, the soil in which they grow is almost pure leaf mold. There are a few which are found growing wild on limestone ledges. These, when brought under cultivation in most instances require the addition of a small amount of lime to the soil.

A large percentage of our native ferns grow on sloping ground. This of course affords excellent drainage. If we are to imitate Nature we must also furnish like locations in planting many of our native ferns. Some which are found growing in lowland situations such as the *Aspidium thelypteris*, *Onoclea sensibilis* and the *Osmundas* do not require well drained locations.

These varieties grow in rather sour soil. They will grow, however, in soil that is well drained. It does not necessarily follow that if ferns are found growing in one particular location they must be planted in a like situation or that they will not thrive in places where conditions are different. By exhaustive experiments many of these points have been determined definitely.

It is well, especially when ferns are planted in fall or late autumn, to give them a mulching of leaves. This tends to retain the moisture in the soil and also gives them a slight protection against the freezing weather before the snow comes. Care should be used not to place too heavy a mulch on the newly planted stock since by so doing the ferns are apt to be smothered.

The time of planting ferns does not seem to be particularly essential. Experiments have been tried and it has been found that ferns can be moved during the growing season by cutting off the fronds. New fronds will appear. They will not, however, be as



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FLOWER POTS

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Cambridge, Mass.

NEWS AND COMMENT

NEW ENGLAND.

C. B. Johnson, a Woburn, Mass. florist, is having a new house constructed on the estate adjoining his present residence.

L. Harry Brague and John B. McMaster of Hinsdale, Mass. have been in Bennington, Vt., superintending the shipping of ferns to the New England cold storage plant in Pittsfield. Owing to the tieup on the electric cars they shipped by automobile trucks.

Albert H. Harvey, 67, a widely-known grower of pansies, asters and ginseng, whose aster bed in 1911 contained 10,000 blossoms at one time, is dead in the Brattleboro (Vt.) Memorial Hospital.

Philip Dauenheimer of Springfield, Mass., is building a greenhouse at the rear of his residence on Dawes street. Mr. Dauenheimer has been in the florist business for most of his life, having been connected with William Schlatter & Son for the past ten years.

J. Harry Playdon, a well-known florist of Lawrence, Mass., has been enjoying a two weeks' vacation in Nova Scotia.

James E. Duggan, for nine years manager of the John Reck & Son store at Bridgeport, Conn., in company with Frank Smethurst, has opened the Arcade Flower Shop. The new store has been well fitted out and is one of the prettiest in Bridgeport.

The Leominster, Mass., Floral Co. has been incorporated. The directors are Robt. S. Edgar, president; Joseph Fuller, treasurer, and Lillian Nordgren.

BOSTON.

Charles H. Rice of Lexington is adding 100 feet to his greenhouse range. Of course, he will use the additional space for more carnations, as he has become famed for the quality of his product.

At the October meeting of the Boston Gardeners' & Florists' Club, J. G. Jack of the Arnold Arboretum is to lecture on "Flowers and Fruits of our Native Shrubs and Trees."

Julius Snyder and Arthur Carr have returned from a long automobile trip, during which they visited growers in

New York, New Jersey, Vermont and New Hampshire. They had an excellent trip.

W. C. Stickel, the Lexington carnation grower, has about 40,000 plants in extra fine condition.

The face of J. Eisman will be missed from Penn's in the future, as Mr. Eisman has opened a new store on Beacon street, near Tremont. He goes into his new work with the best wishes of the Penns, who presented him a purse of gold.

Philip L. Carbone of Boylston street is back from his annual European trip.

William Sim is adding another house to his range at Cliftondale.

NEW YORK.

The New York Flower Co., a Yonkers concern, has purchased the business property at 244 Main street, New Rochelle, and will take possession October 1.

Mr. Bert Dowden, who has held the position as shipping clerk for three years has resigned his position at the Rochester Floral Co., owing to poor health and will move to Maine.

N. Harold Cottam and son of Wappingers Falls had eight entries of dahlias at the state fair in Syracuse and won eight first prizes. Among their awards were prizes for the best collection of all types of dahlias, twelve varieties, five of each and for the best collection of cactus, single, pompom, peony flowered, and decorative dahlias.

PRES. F. R. PIERSON RE-ELECTED.

The annual meeting of the New York Federation of Horticultural Societies and Floral Clubs at the State Fair, Syracuse, was called to order with President F. R. Pierson presiding. Eighteen delegates were present from the affiliated organizations. President Pierson spoke of the three projects in which the Federation is especially interested at this time, viz., the erection of a horticultural building at the State Fair grounds, Syracuse; the erection of investigational greenhouses for the Department of Floriculture at Cornell University; and Plant Quarantine No. 37. In regard to Plant Quarantine No. 37, Pres-

ident Pierson stated that the organization had already gone on record as in opposition to this quarantine, and therefore it was unnecessary to discuss it further. In regard to the horticultural building, he thought that the time was ripe and he outlined the general policy which should be adopted in the campaign for the building. He was optimistic that the building would come in the near future.

A resolution was passed urging the necessity of an immediate consideration of a horticultural building, and a committee consisting of D. Lumsden, Ithaca, chairman; Dr. Erl Bates, Syracuse; Madison Cooper, Calcium; F. A. Danker, Albany; and A. Cowee, Berlin, was appointed to confer with the state architect regarding plans for the building.

The following officers were elected: President, F. R. Pierson, Tarrytown; first vice-president, Dr. Erl Bates, Syracuse; second vice-president, Charles Vick, Rochester; third vice-president, Hugh McCarthy, Syracuse; fourth vice-president, F. A. Danker, Albany; fifth vice-president, W. H. Workman, Oswego; treasurer, W. A. Adams, Buffalo; secretary, E. A. White, Ithaca.

PHILADELPHIA.

George D. Clark, manager of the flower, seed and bulb dept. of Dreers, returned on the 18th inst. from an inspection trip of growing crops under contract. His journey covered as far west as the Pacific coast and points in between.

Michell's had a fine new dahlia on exhibition at their store on the 20th inst. It is named Autumn Sun and is a beautiful buff orange cactus, shading to very dark at the center. The flowers shown were five to six inches in diameter and both in form and color very charming. The variety was raised by a Jersey grower and will be introduced by Michell next spring.

A handy volume for seedsmen and others to have at their elbow is "The Book of Grasses," by Mary Evans Francis. It describes and illustrates the common grasses of the fields and waysides—and these, to many of the boys back of the counter, are not well known, and customers often bring in specimens and want to know what they are and all about them. For the commercial grasses a smaller and less costly volume, "Barenbrug on Grasses," covers the ground very concisely.

Mr. Hurd, late of Dreers, is now manager of the flower seed dept. at I. N. Simon & Sons, 5th and Market street.

THE BOILER OF Unequalled Fuel Economy

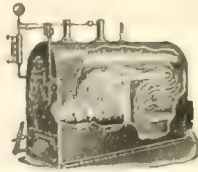
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Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

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OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

WINTER COURSES IN FLORICULTURE AT CORNELL UNIVERSITY

Registrations are now being made for the short course in floriculture which begins Wednesday, November 5, 1919, and closes with Farmers' Week, February 9 to 13, 1920. There are classes for commercial florists as well as amateurs. The winter courses are business and occupational courses, not academic; hence there are no examinations for admission. In the distinctly professional courses in floriculture, in addition to the instruction in commercial flower growing, greenhouse practice, greenhouse construction and heating, courses in agricultural chemistry, soils, plant diseases and injurious insects are required. Students also have a wide range of other subjects from which to elect courses. Each week during the coming term a practical specialist in some branch of floriculture will come to the college to give the students talks from every-day experiences. A splendid list of speakers has been arranged. For any information regarding the course, write the Secretary of the College of Agriculture, Cornell University, Ithaca, N. Y., or Professor E. A. White, Department of Floriculture.

THE MARKET SITUATION.


The flower market the country over has been marking time the past week. In several sections, as in Rochester, the arrival of cooler weather has brought about an increased sale of potted plants. Fall openings in a number of cities have brought out a good demand for ferns, palms, glads and hydrangeas. Glads are plentiful in all markets and asters are in great abundance. Unfortunately, the quality as a whole is not of the best. In Boston carnations are steady and at prices which are better than have prevailed for past years. The same is true of roses. In fact, the latter have held

DREER'S "Riverton Special" Plant Tubs

No.	Diam.	Ea.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton Tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER, Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.



CYPRESS GREENHOUSE STOCK

PECKY CYPRESS STOCK

HOT BED SASH

Ask for Circular D and Prices

THE A. T. STEARNS LUMBER COMPANY

NEPONSET, BOSTON

well through the season. The few good asters are selling well. The others are selling for about what they are worth, which is not much.

GODFREY CALLAS.

The Godfrey calla is growing rapidly in favor and growers report good demands. This is an exceptionally good plant and only needs a little more pushing to become very well known. Its continuous flowering makes it an ideal house plant and the flowers are excellent for cutting. More Godfreys are being put out in New England than ever before. It is not necessary to have large bulbs, either. To be sure they will flower earlier and make larger blooms, but small bulbs carried along with bottom heat and plenty of water will flower by the turn of the year and then throughout the season. It is not necessary to rest this calla, according to the experience of several growers.

MASTER BRAND CONCENTRATED MANURE!

Greenhouse and Garden Fertilizers. Write us for detailed information and prices on

High Grade Concentrated
Sheep Manure

and our

Vine and Plant Manures

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Free from Bubbles
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PAINTS and PUTTY

Greenhouse White (Semi-Paste) The
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Florists Prefer

It will pay you to get our estimates.

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USE IT NOW

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Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Lasts longer than putty. Easy to apply.

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CONCENTRATED PULVERIZED
MANURE

Pulverized or Shredded
Cattle Manure

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Sheep Manure

The Florists' Standard of uniform high quality for over ten years. Specify **WIZARD BRAND** in your Supply House Order, or write us direct for prices and freight rates.

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CLASSIFIED DIRECTORY

Advertisements in this Department, Ten Cents a Line, Net

ASPARAGUS PLUMOSUS

Asparagus plumosus seedling: \$1.00 per 100; \$6.00 per 1,000. **ALFRED M. CAMP BELL**, Strafford, Pa.

BULBS

C. KEUR & SONS, HILLEGOM, Holland. Bulbs of all descriptions. Write for prices. **NEW YORK BRANCH**, 8-10 Bridge St.

CANNAS

For the best Up-to-Date Cannas, get new price list. **THE CONARD & JONES CO.**, West Grove, Pa.

CARNATION STAPLES

Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c.; 3000 for \$1.00 postpaid. **I. L. PILLSBURY**, Galesburg, Ill.

CELERY PLANTS

Celery plants, Easy Blanching; now grown exclusively by 90% of Kalamazoo growers in place of Golden self Blanching. Strong plants, ready for the field; \$2.25 per 1,000, \$6.00 for 3,000. Cash. **BRILL CELERY GARDENS**, Kalamazoo, Mich.

DAHLIAS

Peony Dahlias Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. **JOHN P. ROONEY**, New Bedford, Mass.

New Peony Dahlia—**John Wanamaker**, Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to **PEACOCK DAHLIA FARMS**, Berlin, N. J.

DAISIES

Daisies, Bellis, Monstrosa, pink or white, also Long Fellow and Snowball, fine strong plants, \$3.00 per 1,000, \$8.25 for 3,000. Cash. **BRILL CELERY GARDENS**, Kalamazoo, Mich.

DELPHINIUM

Delphiniums. All who have seen my Delphiniums pronounce them as fine as ever they have seen. Write for trade list. **WILLIS E. FRYER**, Mantorville, Minn.

GOLD FISH

Gold fish, aquarium plants, snails, castles, globes, aquarium, fish goods, nets, etc., wholesale. **FRANKLIN BARRETT**, Breeder, 4815 D. St., Olney, Philadelphia, Pa. Large breeding pairs for sale. Send for price list.

IRIS

Iris. Tall bearded, Comte De St. Clair, Her Majesty, Gertrude, Gypsy Queen, Laurentinus, L'Avenir and Thyspe, \$4.00 per 100, \$35.00 per 1000. Rhein Nixie, \$10.00 per 100. Siberian Iris: Lady Godiva, blooms with the first tall bearded iris, distinct, \$5.00 per 100, \$45.00 per 1000; Superba, violet-blue, and one of the best of the Siberian Iris. Write for complete Trade List. **WILLIS E. FRYER**, Mantorville, Minn.

KENTIAS

Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2½-inch pots at \$15 per 100—larger quantities on application. **J. H. FIESSER**, 711-741 Hamilton Ave., North Bergen, N. J.

ORCHIDS

HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laelio-Cattleyas our specialty. One trial order solicited.

PANSY PLANTS

Pansy Plants, strong and stocky, "Superb Strain", \$4.00 per 1,000, 3,000 for \$11.25, 5,000 for \$17.50, cash. These plants and strain will please you. **BRILL CELERY GARDENS**, Kalamazoo, Mich.

PHLOX

Phlox. I have a large stock of the best of the standard varieties and a number of my new varieties which compare favorably with any of the standard varieties. Write for trade list. **WILLIS E. FRYER**, Mantorville, Minn.

PEONIES

Peonies. The world's greatest collection, 1200 sorts. Send for list. **C. BETSCHER**, Canal Dover, O.

POINSETTIAS

Poinsettias, 3 inch, \$15.00 per 100. 2½ inch, \$12.00 per 100; \$100.00 per 1,000. **ALFRED M. CAMPBELL**, Strafford, Pa.

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Live Sphagnum Moss, orchid peat and orchid baskets always on hand. **LÄGER & HURRELL**, Summit, N. J.

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Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. **J. H. TROY**, Mount Hissarlik Nursery, New Rochelle, N. Y.

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Have you ever given careful consideration to the cost of your fall repair work? If not, now is the time to make preparations for reducing this cost. Our line of Greenhouse Fittings will be found just the thing for practically all of the work which you intend to do. Write for descriptive catalog on Sash Operating Device and Greenhouse Fittings. It will repay you many times. Write today.

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Only four years ago the Boston Floral Supply Co. started to manufacture in a very small way, until today we have grown to be the largest producers of artificial flowers for florists' use in the world. We were confronted during these four years with a variety of problems. The greatest problem we had to solve was how to establish an unbending confidence between our customers and ourselves.

We knew quite well that if we sold goods to a customer adding only a small profit to our manufactured article, plus prompt and courteous service that there would be established just the confidence to receive a duplicate order. Not only would we receive a duplicate order, but we felt that such a satisfied customer would always have a good word to be passed along to another florist.

This is Just What Has Happened

And today we have hundreds of satisfied customers.

If you have never dealt with us, don't you think it would pay you to give us a trial order for **Wax Flowers**, Sprays, Wax Designs, Magnolia Wreaths, etc., amounting to \$25.00, or a trial order of an assortment of baskets amounting to \$25.00? Our guarantee

"If our goods are not satisfactory, we will refund your money"

should leave no doubt in your mind as to try us out in this way.

We want you to feel that no matter how small your wants may be, whether it is for one carton magnolia leaves, one roll ribbon, a box wire, a box toothpicks, a few of our cut flower boxes, some pins or letters, etc., we shall be glad to serve you on receipt of your order.

We shall be very thankful to you if you will be kind enough to send us your criticisms concerning both our goods and our service if you feel that we ought to be criticised.

Should you also feel that we have overcharged you in any way even long after your purchase, we shall be glad to take the matter up for adjustment.

CUT FLOWER and EVERGREEN DEPT.

Our **Cut Flower Department** is up to date. We handle the output of the best growers. Mention the train on which you desire your goods to be shipped and we will make every effort to get them on that train.

Telephone or telegraph your orders for Cut Flowers and Supplies at our expense.

We manufacture our own Artificial Flowers, Wax Designs, Sprays, Baskets, Boxes, Wire Frames and Florists Supplies, and preserve our own Cycas and Foliage right on our own premises.

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HORTICULTURE

Vol. XXX

OCTOBER 4, 1919

No. 14

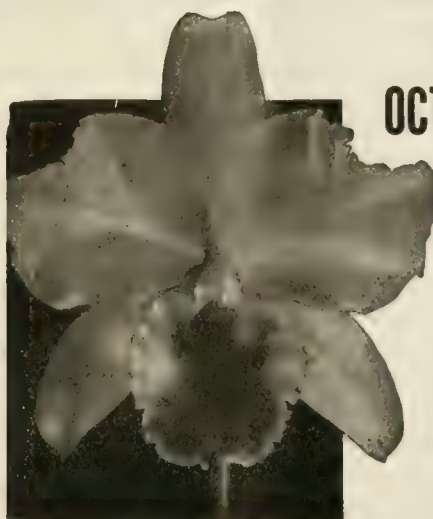
NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

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FOR THE OCTOBER BRIDE

CATTLEYAS, light and dark.
SPRAY ORCHIDS, also a few white.
VALLEY in limited quantity.
SWEET PEAS, White, Pink and Lavender. \$2.00, \$3.00 per 100.
TRITOMAS, \$6.00, \$8.00 per 100.
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DAHLIAS, Fancy Varieties at \$8.00, \$10.00, \$12.00 per 100.
Plenty of others, good quality too, at \$3.00, \$4.00 and \$6.00.

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We have a small surplus of about 3,000 ROSALIND (The Improved Ophelia), strong plants out of 3½-inch pots, which we are offering at a specially low price to clean out, viz.:

\$25.00 per 100 — \$200 per 1,000

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We have a splendid lot of ferns in the following varieties and sizes, for immediate shipment, viz.:

NEPHROLEPIS	Each
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Dwarf Boston, 3½-inch pots.....	.25
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Elegantissima, Elegantissima compacta, and Superbissima, 6-inch pots.....	.75
Muscosa, 5-inch pots.....	.75
Elegantissima and Elegantissima compacta, 8-inch pots....	2.00
Elegantissima and Elegantissima compacta, 10-inch pots....	4.00
Harrisii, 8-inch pots.....	3.00

F. R. PIERSON, Tarrytown, N. Y.

FERNS

Boston and Scottii, pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

5-inch \$4.80 per dozen — \$35.00 per 100

Alyssum Giant Double, Heliotrope, Lantanas, English Ivy, Swainsona, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts. For immediate shipment from 2-inch pots \$2.50 per 100, \$22.50 per 1,000.

Hardy English Ivy, Double Giant Alyssum, strong plants from 3-inch pots, \$3.50 per 100.

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R. Vincent, Jr., & Sons Co.

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2 Yr. Field Grown Teas and H.T. Roses

Ophelia, White Killarney, Pink Radiance, Red Radiance, Sunburst, Prima Donna, Pink Cochet, White Cochet, Pink Dorothy Perkins, White Dorothy Perkins and Others

Fine Plants Ready for Shipment in October and Later
\$35.00 Per 100

1 Year Field Grown: Excelsa, Dorothy Perkins, and others, at \$20 per 100.
Macawi: Still a small surplus of this fine fern \$20.00 per 100 for 2 1/2-inch \$1.50 each for specimen plants in 6-inch pots. \$1.25 for same in 5-inch.
Yellow Callas, \$20.00 per 100; White Callas, per 100 \$12.00 and \$20.00

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PAPER WHITES, 12-15, 13-15 and 14-16c/m
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S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN.

The Fall advertising in connection with our Campaign commences with a two column display in the issue of Collier's Weekly for October 4th, the circulation of which is over a million copies. Other prominent weeklies will be used at the start, and will principally be used throughout November. The monthlies will be used throughout December, their dates of issue being early in November, so that Thanksgiving and Christmas business will be featured, colored pages being used in the Metropolitan Magazine, Century, Atlantic Monthly, Harper's, Scribner's, Review of Reviews, World's Work and Munsey's.

Our Committees would have gone much further, had their original plans been possible of accomplishment. It is not their policy to contract for more publicity than the funds in sight would warrant. Space in the mediums used is very expensive, and a \$20,000 appropriation is not made without considerable thought. The Committees' work, as laid down is handicapped by the very slow materialization of subscriptions. The influx of contributions may be quite good for a week or two, then comes a lull, showing that very many florists are not bothering themselves with this great and important matter of publicity for flowers. There are probably 13,000 florists who can well afford to subscribe, who have as yet shown no disposition to do so, although they must admit that the Campaign has been wonderfully effective. East and West, North and South, our slogan has become well implanted in the public mind, and it is up to every florist to render assistance to keep it there—and this means that he must contribute according to his means.

This should not be allowed to be a Campaign of the few, as all are interested in proportion to their investments. There has been no dictation as to how much a florist should give—that is a matter entirely for him to decide. In other lines of business where campaigns such as ours are conducted, contributions are on a specific basis, and no difficulty is experienced in collecting the fund aimed for. And we should have no difficulty; if every florist in this country should contribute only \$5.00, our Fund would be easily completed. As

When writing to Advertisers kindly mention Horticulture

Henry H. Barrows

FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

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CHRYSANTHEMUMS
MADISON, N. J.

Nephrolepis Norwood

Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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ELMER D. SMITH & CO.
ADRIAN, MICH.

Snow Queen Canna
Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The **CONARD & SONS** CO. WEST GROVE, PENN., U.S.A.

Robert Fyle, Pres. Arvid Winters, Vice-Pres.
We are subscribers to the Nurserymen's Fund for Market Development

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CERTIFIED PUBLIC ACCOUNTANT

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BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

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E. W. FENGAR

CHRYSANTHEMUMS

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IRVINGTON, N. J.

It is, several of our wise and up-to-date members of the trade have contributed One Hundred times this amount. You gentlemen who have not subscribed might well ask yourselves why they have done this. It could not have been that they alone were likely to benefit, but rather that the interests of the whole industry would be advanced. Are you willing, are you satisfied that others should bear an expense which is incurred as much for your benefit as for anyone else in the trade? We are sure you are not. Instead of spending \$20,000, this Fall, we ought to be in a position to spend \$50,000, and the money would be forthcoming if you did your part. Just give further thought to this very important undertaking and send in the contribution which we know your conscience prompts you to send—be a "regular fellow" and let us add your name to our honor roll.

JOHN YOUNG, Secy.

COLLEGE SECTION

During the convention of S. A. F. & O. H. held in Detroit, a small group of college florists held a meeting in one of the ante-rooms of the exhibition hall. Professor H. B. Dorner of the University of Illinois was the temporary chairman. He suggested that the college florists form an informal organization with the S. A. F. and O. H. Members present were heartily in favor of this and proceeded to elect a President and Secretary-Treasurer. Dr. A. C. Beal of Cornell University nominated H. B. Dorner for the office of President and Mr. Dorner was unanimously elected. Alfred C. Hottes was nominated for the position of Secretary-Treasurer and elected to that office.

An informal discussion was held in which an attempt was made to formulate the aims of the organization, which may be briefly stated as follows: The college florists should be able to meet together each year to hold discussions relating to the problems of teaching and investigation in floriculture. The organization would give an opportunity for the florists to present to the investigator his problems and for the college man to co-operate with the florist in making plain to him the ideals toward which instructional work and investigation are carried on in the colleges.

It was suggested that all those members of the S. A. F. and O. H. who are engaged in teaching definite floricultural courses or conducting research in floriculture in the Universities and Colleges would be eligible for membership.

Professor Dorner also suggested

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3/4 INCH UP

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BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds.
Improved styles in Implements
Catalogue upon application.

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BOSTON, MASS.

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mention HORTICULTURE

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

Not Too Early to Buy Xmas Stock Now

Get your stock before the other fellow picks all the best. Finish the plants in your own houses and save disappointment later on from express delays, damaged plants and unfilled orders.

Stock listed below is all of best quality. Grown by experts and packed carefully.

CYCLAMEN

Blood Red, Salmon, Crimson, White Carmine Eye, 4 in., 50c.; 5 in. extra fine, \$1.35.

BEGONIA MELIOR AND CINCIN-NATI

Very fine, 5 in., at \$1.35. Can ship at once nice 2½ in., at \$27.50 per 100.

PEPERONIA

Well shaped 5 in. plants, \$1.00 each. LAST CALL FOR EUPHORBIA JACQUINAEFLORA.

SPECIAL OFFER: \$12 per 100; \$100 per 1000.

HELIOTROPE PLANTS.

A good offer for Xmas. Heavy plants from 5 in. pots, 50c.

DRACAENA INDIVISA.

Pot grown—NOT field grown. Strong 3 in., at \$13 per 100, \$125 per 1000.

COLEUS TRAILING QUEEN.

Fine for mixed pan, basket and hamper work. 2½ in., \$6.00 per 100, \$60 per 1000.

BOSTON YELLOW MARGUERITE. True stock, 2½ in., \$7 per 100, \$65 per 1000.

CHINESE PRIMROSE.

Large 5 in. plants, 55c. each.

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BEET, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted as upon application to

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BURNETT BROS.

Seeds, Bulbs, Plants
Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

W. E. MARSHALL & CO.
SEEDS, PLANTS AND BULBS
Horticultural Sundries
166 W. 23rd St., NEW YORK

that a booth be maintained at the annual conventions at which place some of our members would be present to answer questions relating to the problems of the florists.

Those present at the meeting were H. B. Dorner and E. C. Voiz, of the University of Illinois, E. J. Wilde of Penn State College, A. C. Beal, of Cornell University, Jas. Whiting of Massachusetts Agricultural College and A. C. Hottes of Ohio State University.

It is hoped that all instructors who are engaged in teaching definite horticultural courses will correspond with the Secretary so that they may be notified of any developments in the work of the college section.

ALFRED C. HOTTES, Secy.

BRITISH OPINION OF NEW ROSES.

British flower lovers are to be congratulated on the fact that no odious quarantine prevents their enjoyment of new roses which originated in America. In an article in the Horticultural Trade Journal summing up opinion on the new varieties, several American roses are described very favorably. A few of the comments on the new roses are as follows:

Los Angeles will be one of our finest garden roses. Its habit is absolutely perfect, growing about 2½ to 3 feet and is extra free-flowering. Its color is similar to Lyon at its best with deeper shadings of Mme. E. Herriot. Its flower stalk is rigid (a great point) and petals reflex reminding one of a Lyon-colored Chatenay. Tea scented.

Mrs. Henry Winnett. This is another of our best roses from our friends over the sea, and of great promise. It is a seedling from Mrs. Charles Russell and Shawyer but a rich crimson-red and a delicious scent. Shape perfect and of good size; habit of growth also is just what I like to see in a true H. T. Will be largely sought after in future.

Premier is a coming thing of the Russell colorings and scent but of stronger growth, slightly subject to mildew but this can be remedied as roses of this type are wanted.

Columbia, a beautiful rose of the habit of Ophelia but with the absence of its orange tints and pink more pronounced. A rose that will be planted by the thousand when properly known and grown. Scented very strongly, old rose.

Ophelia Supreme, its name at once gives this rose a prominence over its parent, and to my mind is deserving of a place in everyone's garden. The habit of plant is identical with its parent, but the flower is even more beautiful than Ophelia and is larger.

MICHELL'S BULBS

FREESIA "PURITY"

Flowers almost twice the size of the regular type, and a pure glistening white.

	Doz.	100	1000
First Size Bulbs.....	.20	\$1.25	\$10.00

NEW GIANT COLORED FREESIAS

These varieties are equal to the "Purity" in size; have excellent form and splendid texture.

	Doz.	100	1000
BLUE	\$1.25	\$8.00	\$75.00
LAVENDER	1.25	8.00	75.00
PINK	1.25	8.00	75.00
MIXED. All colors..	.75	5.00	40.00

NARCISSUS, PAPER WHITE GRANDIFLORA

First Size, 13 cm up (1250 bulbs to case), Per doz., 40c.; \$2.50 per 100; per 1000, \$21.00.

ALSO HYACINTHS, TULIPS, NARCISSUS, CALLAS AND OTHER SEASONABLE BULBS.

Also Seasonable Seeds and Supplies.

Send for New Wholesale Price List, if you do not receive a copy.

MICHELL'S SEED HOUSE

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BOLGIANO'S 1919 SUMMER AND FALL CATALOG OF "BIG CROP" SEEDS

Special Prices for Florists and Market Gardeners. Write for a copy at once—it will save you money.

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Seeds and Bulbs
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SEEDS, BULBS, PLANTS JOSEPH BRECK & SONS, CORP.

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INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden
Bronx Park NEW YORK CITY

HORTICULTURE

Vol. XXX

OCTOBER 4, 1919

No. 14

THE TALK OF THE TRADE

Talking with Herman Bartsch, I was interested to get his views regarding *Euphorbia Jacquiniaeflora*. He calls it one of the best of plants for Christmas flowering, and as he has been very successful in handling this plant, it may be interesting to know his cultural methods, which he gives as follows:

Plant any time from August to October in solid beds in a temperature of 58 to 65 degrees and they will make splendid cuttings for Christmas and New Year's business. Do not disturb them after cutting the crop but keep somewhat on the dry side until spring. Commence propagating the early part of June into August. Cuttings taken in July are best for pot plants. Put several of them together in pans or pots and they give splendid results and find a ready sale. The carried over stock is best for root cutting purposes, but for cut sprays and new stock for pans the young stock gives the best results.

A grower who has had exceptionally good results from the Godfrey Calla says in addition to what was stated in the Sept. 27th issue of *HORTICULTURE* regarding this plant that small plants started as late as October will give good results next spring; in fact, if handled right they may be brought into flower by the turn of the year, and while the blooms will be smaller, they will produce freely.

Some of the retail florists are expressing the belief that Fardell's colored freesias are bound to become popular and sell very well indeed. There is every reason to believe that this will be true, for these flowers are certain to appeal to buyers, because of their wide range of colors. Moreover, they are good keepers and compare favorably with the Purity strain for size and texture. Of course these new freesias are not being grown very widely as yet, but several growers are stocking up. At least I judge that this is so, for not long ago I saw an excellent lot at Frank Edgar's place in Waltham, Mass.

I note that John Lewis Childs is featuring *Coleus Trailing Queen* in his retail catalogue. He has a good colored illustration which ought to bring many orders. As a matter of fact, this is an excellent plant for the trade and is being sold to a considerable extent for florists' use. It is particularly useful in filling out hampers and baskets and will fill in the empty space under crotons and even poinsettias. The color is warm and pleasing, and harmonizes well with other things. For giving a touch of warmth and life, this *coleus* is decidedly worth while.

To the trade Mr. Childs is now offering a white gladiolus, a seedling of America, but whether it will achieve the popularity which he evidently expects is a question. Truth to tell, white glads do not seem to find great favor with the buying public. Color is expected and desired apparently in glads. In olden days only white flowers were considered suitable for funeral work, but now colored flowers are just as acceptable and many warm hued gladioli are used for that purpose. Perhaps a fine big, pure white glad might make a hit, but most of those offered are not snow white by any means, and judging from what I have heard this is true of Mr. Childs' subject. It actually carries a blotch of color. Still, it is a very promising plant and quite possibly may score a great success. Nobody can safely make a prediction in such matters.

THE TRAVELING SALESMAN.

GOOD MARKET CONDITIONS

Market conditions all over the country are picking up. Also stocks are being nicely cleaned up. In Boston the market closed strong last Saturday and started in with equal strength on Monday morning, something which does not always happen. Asters are practically out of the market all over the country. Some are coming in to be sure, but are so poor as to hardly be worth mentioning. Glads. are becoming short and have more than doubled in price. Roses are in good demand and it is worth stating that they are wonderfully good in quality, considering all things.

ROBBERY OF RARE PLANTS.

A Dastardly Act Committed at the Arnold Arboretum.

A few nights ago a considerable number of exceedingly rare plants were stolen from Azalea Path on the side of Bussey Hill in the Arnold Arboretum. It was one of the boldest thefts of the kind ever committed and created so much comment that the Boston papers printed more or less sensational stories about the matter on Wednesday morning.

The loss of the plants was discovered by E. H. Wilson, the assistant director. While walking through the grounds he saw that several plants of azaleas and *enkianthus* had disappeared from the beds along the path, but supposed they had been moved. When he mentioned the subject to Prof. Sargent and to Supt. Van der Voet, however, both disclaimed any knowledge of the matter. Further investigation then revealed the robbery.

It was evident that the work had been done by men thoroughly familiar with the Arboretum and with the plant collections. They had made no mistake, but in each case had picked out very rare and valuable specimens. In all probability they saw the plants in bloom in the Spring and planned the robbery then. And they must have been expert enough to recognize the rarity and value of the plants. Among the plants removed were several azaleas, including a specimen of the new Hunnewell azalea originated by Mr. Hatfield at the Hunnewell place in Wellesley. Among the other plants were several species of *Enkianthus*, including *E. campanulatus*, which bloomed this season for the first time in this country. Plants of *E. deflexus* and *E. cernuus rubens* were also taken.

This is not the first time this year that plants have been stolen from the Arboretum, several rare plants having been taken from the beds along Azalea Path in the Spring. Only recently, too, all the seeds were stripped from the fine specimen of *Rosa Hugonis* in the shrub garden and from a plant of *Symplocos paniculata* on Lilac Drive. Here, too, the work must have been done by men familiar with the plants, or the particular subjects would not have been selected. A reward of \$200 has been offered for the detection of the thieves.

AMERICAN DAHLIA SOCIETY.

Owing to a heavy rain, the fourth annual meeting and exhibition of the American Dahlia Society held at New York last week was not as largely attended as might have been wished, but much interest and enthusiasm was shown. The interesting address of President Richard Vincent, Jr., was in part as follows:

PRES. VINCENT'S ADDRESS.

Under the happy auspices of Peace may I ask every member to earnestly work for the upbuilding of our American Dahlia Society. But let us not be selfish but help other Societies as well as our own, especially the parent Society, the Society of American Florists, whose slogan is "Say It With Flowers," and which society is doing every thing possible to build up the love and use of flowers. Kindly do your part and the interest not only in our Society but every other kindred Society will grow, and you will probably help the world to be more brighter and beautiful.

As president of the Society I receive numerous inquiries by letter as to varieties for different purposes, planting, manuring, insect pests, handling and keeping of the bulbs, etc. Some of the questions are very easy to answer, while others, to a fellow like myself who does not know it all, are puzzling. If answered by letter it is only the individual or club that is benefited, whereas, if asked and answered through the bulletin many others may be benefited. So I suggest that our next years bulletin contain an "Inquiry," department.

New Varieties.

The increasing number of new varieties has made extra work for the Society, to watch that too many duplicates are not put on the market or something very similar to what already exist.

In the last few years, since the formation of our Society, there has been an increased interest in the propagation of new seedlings. Some of them which have been shown by amateurs are equal to any that have been produced, but again, others have been given a name that have no special qualities whatever over existing varieties.

Our friends on the Pacific Coast have produced some beautiful varieties that are distinct from any produced elsewhere. It appears from the ruling of the National Horticultural board that under rule 37, we will have to depend on our own country for new varieties, and I will say that I believe we are equal to the necessities of the occasion and can hybridize and pro-



NEW IMPROVED IRIS

	Single roots	
	per 100	per 12
CAPRICE, silky purple.....	\$6.00	\$.85
HER MAJESTY, best clear pink....	6.00	.85
MONSIEUR, velvety purple.....	10.00	1.40
LOHENGRI, silvery mauve.....	10.00	1.40
QUEEN ALEXANDRA, new lavender	10.00	1.40
RHEIN NIXE, white and raspberry	10.00	1.40
ISOLINE, opalescent lilac.....	20.00	3.00
PARISIANA, mottled lavender.....	20.00	3.00

No order accepted for less than \$2.00. Not less than 6 of one kind at the 12 rate or less than 25 at the 100 rate. No charge for packing.

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30 N. LaSalle St., Chicago, Ill.

duce new varieties as good as are raised anywhere else in the world.

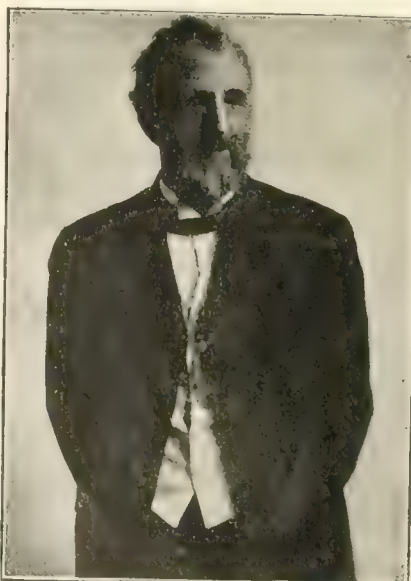
Nomenclature Committee.

The Nomenclature Committee of the Dahlia Society met in New York the past spring to classify some of the new hybrid types that have been produced the last year or two.

There has been a change in the formation of new dahlia types and hybrids produced for which no class has been formed. We believe that we have this straightened out for the present, but no one can say how long it will last, for we are only at the beginning of dahlia breeding and some astonishing novelties can be looked for in the near future.

Trial Grounds.

Some years ago after the organization of our society we established trial grounds under the supervision of



Richard Vincent, Jr., Re-elected President

Prof. Hall and the New York Experiment Station at Geneva, N. Y. Prof. Hall through sickness had to relinquish the care of same, and the necessity to have one somewhere else not too far from New York confronted us.

Prof. Fraser of Storrs, Conn., undertook the job, although it was impossible to accomplish very much the past season on account of limited time. The results show for themselves as per report of the committee, which will be given at this meeting. We hope with the co-operation of members another season to be able to show the work of the trial grounds to better advantage and the good of all concerned by giving a complete list of the best varieties for the garden and for cut flower purposes and also eliminating old and practically useless varieties.

We want the help this coming season of all our fellow members not only to increase our membership but to increase the interest in the planting and cultivation of the dahlia.

The dahlia stands for loyalty and if you love the flower (and who does not who has any love for the beautiful), then be loyal to her cause and "Say it with flowers and dahlia flowers whenever in season."

If you have a spare bulb give it to your neighbor who has none with the request that he plant it and if he is successful you will have made another dahlia lover and possibly a member of the dahlia society. We want members and we want to see the dahlia growing in every home garden, wherever possible. So fellow members not only grow dahlias but talk dahlias and the result will follow.

And now in conclusion as your retiring president I want to thank all,

both officers and members, for your forbearance, courtesy, and kindness to me as your presiding officer during the past year.

We have striven together to bring results we see before us today, and we can return to our homes rejoicing that we have made this world look brighter and better to someone by seeing the beautiful coloring of nature as exhibited here today in this wonderful exhibit; and may the education given be the means of making more homes and gardens beautiful and God like.

ELECTION OF OFFICERS.

I. S. Hendrickson offered a resolution that the American Dahlia Society place itself on record as protesting emphatically against Quarantine 37. The resolution was passed unanimously.

The following officers were elected:

President: Richard Vincent Jr., White Marsh, Md.

First Vice-President: Geo. L. Stillman, Westerly, R. I., representing the Eastern States.

Second Vice-President: Geo. W. Kerr, Philadelphia, representing the territory south of New York.

Third Vice-President: Jas. Duthie, Oyster Bay, N. Y., for Long Island and New York.

Fourth Vice-President: W. W. Wilmore, Denver, Col., representing the West.

Fifth Vice-President: Major N. F. Vanderbilt, for the Pacific Coast.

Treasurer: Wm. J. Rathgeber, New Haven, Conn.

Secretary: E. C. Vick, 205 Elwood avenue, Newark, N. J.

Executive Committee: I. S. Hendrickson, Flowerfield, L. I., N. Y.; P. W. Popp, Mr. Darnell, Long Island, New York; F. Louis Alling, New Haven, Conn.; Wm. Noonan, Locust Valley, N. Y.

Nomenclature Committee: Prof. Geo. W. Fraser, Storrs, Conn.; James Kirby, Huntington, N. Y.; E. Stanley Brown, East Moriches, N. Y.; I. N. Fallor, Richmond Hill, N. Y.; Harold Cottam, Wappingers Falls, N. Y.

In conclusion President Vincent thanked the members for re-electing him to office. He urged them to make an effort to obtain new members and to encourage in every way the growing and use of the dahlia. "Say it with a Dahlia" should be the slogan of the society, he said. The meeting then adjourned.

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FLOWERS UNDER GLASS

There is still time to start a batch of Marguerites. They sell well at Easter. They are plants which do best without very high forcing. Start Marguerites in January for spring sales.

This is a fine time to stock up with small plants and thereby save money. It is possible to buy large numbers of plants in small pots just now, for the growers have full houses and would be glad in many cases to clear their benches somewhat. There are plenty of men who waited until shortly before the holidays last season and then found themselves paying much higher prices than they had dreamed of or else unable to get enough stock to meet their demands. There is no better time to start buying than right now.

If you are growing Longiflorums for Easter you will do well to pot them up now into 5 or 6-inch pots, which will satisfy the trade. Good new soil is required. Use three parts of soil and one part of rotted horse or cow manure. Be sure that there is plenty of drainage in each pot. Let them make their roots in a deep frame or in a cellar. If neither is available make a trench in a well drained location and cover them with six inches of soil, putting on some manure when freezing weather comes. Before January they should go into a house with a night temperature of 50.

If you want cyclamens for Christmas, and there promises to be a big demand this year, the buds should be showing well now. Keep the plants up well to the glass, but do not have the atmosphere too moist. A night temperature of from 50 to 55 is about right, but with a 10 or 15 degrees rise in sunshine. It does not pay to crowd these plants and care should be taken to spray only in the morning.

Be getting the Bermuda lilies into a warm house, say with an average temperature of 60, which will bring them

along in time for Christmas. Be careful about watering. Let them get to the point of showing dryness, and then wet the ball through. Fumigating once a week will be required. Stake when 15 or 18 inches high.

You will need plenty of sunshine to keep the chrysanthemums doing well, and it may be well to spread some lime below the benches, especially if the house is inclined to be damp. Damping off of the petals is the thing to prevent if possible. Naturally a very moist atmosphere is not good for the flowers, so that watering in the morning is the best plan. Disbudding should be started at the top of the plant, for if the top should accidentally be broken off, there is always a chance of getting a side shoot or bud.

The night temperature in the rose houses may well be dropped to 62 at this time. It is best to keep the air on all night, an inch of air being the least the houses should have until frost comes, after which, of course, it can be cut down to a crack and eliminated altogether when the weather gets very cold.

COMING EVENTS.

Buffalo, N. Y.—F. T. D. Ass'n, annual meeting, Oct. 14 and 15. Sec'y, Albert Pochelon, 153 Bates street, Detroit, Mich.

Denver, Colo.—Chrysanthemum show, Denver Society of Ornamental Horticulture, Oct. 29 to 31, City Auditorium. S. R. DeBoer, 208 Tramway Bldg., Secretary.

New York City.—Hort. Society of N. Y., 'Mum and flower show, at Amer. Museum of Nat. History, 77th street and Central Park West, Oct. 30 to Nov. 2. Sec'y, Geo. V. Nash, Mansion, N. Y. Botanical Garden, Bronx Park, N. Y. City.

New York City.—International Flower Show, March 15 to 21, 1920. Sec'y, John Young, 1170 Broadway, New York City.

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The Arboretum thefts

It is difficult to find suitable words in which to condemn the action of the men, whoever they were, who robbed the Arnold Arboretum of some of its most valuable plants, as reported on another page. This was not vandalism, but a carefully thought out and crafty theft. It is impossible not to believe that it was done by expert gardeners or else by men with nursery training. They knew exactly what plants they wanted. They removed them skilfully and smoothed over the holes which were left in a professional way. In all probability they planned the robbery months ago, when the plants were in flower. Possibly they made a diagram of the beds at that time. In any event they went directly to the spot and apparently dug the plants they were after without waste of time. The job was made easy because there was no police protection, the grounds being entirely unguarded after the workmen left for the day. There is an opportunity for comment in this respect. The Arboretum has never been policed as it ought to be. This is the City of Boston's work, but evidently the city officials do not realize the value of the rare and costly plants which adorn the grounds by the thousands. Vandals and mischief makers have destroyed or injured many plants in the past, as well as breaking expensive labels, and most of them have escaped scott free.

In this case, though, the loss is a very serious one and affects the entire country's garden interests, for these new plants are being grown for the benefit of all the people. As fast as possible the new plants which the Arboretum grows are distributed. Nurserymen in all parts of the land are supplied with seeds and cuttings. The co-operation of all growers, commercial and private, is needed in order that this work may be carried on successfully. The grounds are always open in order that everybody may see just what is being raised. It seems

difficult to believe that any commercial grower could stoop to theft like this in order to obtain rare plants for propagation and ultimate sale, yet all the evidence points in that direction. Let us hope that the reward offered by the Arboretum will bring about a detection of the rascals.

Refuses American trade

That the Federal Horticultural Board is not a popular institution with plant growers across the water goes without saying. An international convention has just been held at Paris and some very emphatic remarks were made about the unjust ruling of the American Board which happens to be in the saddle just now. It was decided to keep hammering away with the hope of having the board's rulings modified, and the Belgian representatives reported that Belgium was doing its best in this direction. This unfortunate little country suffers greatly from the action of the United States authorities, and coming just at the close of the great war in which it was all but crushed, the situation is doubly hard.

There are other foreign complaints, however, aside from those which have to do with the importation of plants. Seed shippers are becoming very uneasy at the treatment they are receiving. An example worth citing is that of a Scotch seed company. This company wrote a letter to *The Seed World*, which has now been reproduced in the *Horticultural Trade Journal*, published in London and seems wholly self-explanatory. It reads as follows:

"We have just received your favor of May 16th last enclosing advertising contract, and feel greatly obliged. We have given the idea of advertising in *The Seed World* every consideration and we have decided that for the present we shall not advertise for trade with America, and our reasons are entirely owing to the present American Seed Law regarding prohibition into America of seeds which do not come up to a certain germination, and from which there is no appeal.

"No matter if we hold our Government Certificate of Analysis from our testing stations, that is completely ignored by your Government, and consequently large quantities of seeds have been shipped back to this country lately. We have some experience ourselves and we found that the seed which was returned to us is perfectly sound and within a very small percentage of what it was tested before being shipped from here. Therefore, as there appears to be no appeal from your American Board of Agriculture in the question of germination of seed received, we ourselves are inclined to employ our time and capital in some other markets where the risk is not so considerable, and we may say that we have had some enquiries lately to which we have given a similar reply.

"Every country to which we ship seeds—and there are many—willingly takes our Government Station's Analysis.

"We hope that there may be some means taken to remedy what we consider an evil."

RAMBLING OBSERVATIONS OF A ROVING GARDENER

When walking through the Arnold Arboretum the other day I was again impressed with the rare beauty and grace of the Japanese fir, *Abies Homolepis*, or as it is often called *A. brachyphylla*. When Prof. Sargent gives this tree a place in the very short list of evergreens suitable for New England and other northern states, I am sure that he is making no mistake. It is quite as hardy as any native American evergreen and retains its beauty for years. It has dark green leaves that are silvery white on the lower surface, and dark purple cones. Perhaps the finest specimen in the country is to be found on the Hunnewell place at Wellesley. This splendid example of the Japanese fir's adaptability to New England conditions is over 55 feet high

and yet its branches sweep the ground. While the Arboretum trees are not so large, they have made good growth and are producing cones. The Arboretum also has a variety with green cones and lighter colored leaves that is making vigorous growth. *Abies Homolepis* is a tree which deserves the consideration of nurserymen not already familiar with it, for it ought to become common on American estates.

Already many of the trees are putting on their gay fall attire, and we cannot fail to rejoice in their beauty, even though it indicates the speedy coming of the melancholy days about which poets have loved to sing in minor key. As a matter of fact, these

need not be "the saddest days of all the year," for it is quite possible to have the garden so bright with color that the flowers of summer will hardly be missed. Indeed, there are indications that garden makers are coming to plan more for fall and winter gardens, because they are choosing such trees and shrubs as carry warm-hued foliage in the autumn and bright berries through much of the winter. There are many such plants, including hawthornes, crabapples, barberries, bayberries, viburnums and the black alder.

It is even possible to develop trees which are conspicuous for their fall foliage. That some individuals of different species have a habit of changing color earlier than most other trees of the same kind and that some have a much higher color than their companions is a fact well known to close observers. Sometimes a tree will be found which has a single branch of brilliant leaves while the rest of the foliage remains still green, or the



Good Specimen of *Abies Homolepis*

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leaves on one branch may be much warmer in color than those on the other branches.

Now it is quite possible to make grafts from such a tree and thus impart these peculiarities to other trees. An example is to be found in the Arnold Arboretum, where a maple opposite the Administration building attracts much attention because of its wonderful brilliancy and its habit of taking on its autumn garb very early. Now this tree has been grafted with scions from a tree in Newton, Mass., which naturally manifested these abnormal features and the same characteristics are being reproduced. Surely there is a hint here for nurserymen. It is a new field, perhaps, but it seems worth cultivating.

THE F. T. D. MEETING AND ITS MEANING.

Are you preparing to go to Buffalo October 14th and 15th to rub shoulders and meet those whom you are in the habit of telegraphing orders to and who will prove themselves worthy of meeting face to face?

To those who have formed the habit of attending F. T. D. meetings nothing need be said. But a word to the one who is doubtful about going, permit me to say, that the growth of the florist industry can be reflected in the interest of the members of the F. T. D. and its proceedings.

Everyone present has the interest of the body at heart and the interest of one becomes the interests of all. When President William F. Gude calls for the opening of the meeting up to the time of finish it is just one big family group all bent on giving their neighbors the benefit of the past year's experience. This is one of the gatherings where even a good listener demands a chance to talk once in a while, and he gets the chance too.

HENRY PENN, Chairman,
National Publicity Committee.

George Watson's Corner

"You in your small corner and me in mine."

John D. Eisele, president of the Henry A. Dreer Corporation, arrived home at Riverton, N. J., on the 25th ult., accompanied by Mrs. Eisele from their western pleasure tour extending over many weeks and a wide territory. They both look well, particularly Mr. Eisele, who gained a pound a week during the vacation and is in the pink of condition and ready for another year's enthusiastic work in producing the finest foliage and flowering plants for which the Dreer place is justly famous. Employees of the nursery welcomed their chief home with an immense floral horseshoe made of orchids and roses, and for his desk two large bouquets. Now is the time to go up and see Mr. Eisele and Riverton. He is chuck full of interesting tales of what he saw in his delightful wanderings.

Paul Huebner, landscape gardener for the Reading R. R. system, left Philadelphia on the 27th ult. for an eight day pleasure tour of the Southern states. He is accompanied by a number of other railroad officials who are also taking a vacation. Paul carries his three score and ten well and is active and fit as one twenty years younger. He is a hard worker and deserves his holiday.

The King Construction Company are back on the job again with their old representative, William J. Muth looking after their interests in Philadelphia. Mr. Muth can be reached by wire, phone or letter at his suburban residence, Lansdowne. Drop him the hint and he'll be Johnny on the spot

with a winning smile and all the latest King wrinkles.

The many Philadelphia acquaintances of Colonel Castle, whose passing away was chronicled in our issue of the 20th inst., are mournful over the sad event—although it was not quite unexpected to most of them, as they knew he had been in rather frail health for some time. His jolly and unique personality was of the most endearing character, and it certainly was one of the treats of a life time to be with him for a few intimate days of a fishing party say at Barnegat Bay, with a score or so of other kindred spirits such as Commodore Westcott delighted to bring around him from far and near for a bit of sport and good fellowship. The Colonel's stories and reminiscences were always a treat and we will all miss him very much and long remember him.

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THE GARDENER'S SECTION

HOW FLOWER EXHIBITIONS ARE JUDGED.

In regard to the comparative merits of flowers or plants on which the judge's final decision is based at any well conducted flower show, it should be pointed out that they are about six in number, namely, (1) Form, (2) Color, (3) Size, (4) Condition, (5) Substance. In the case of some flowers fragrance is often considered of importance. In addition to these main points there is also the question of uniformity, as well as that of setting up or arrangement.

In order to make oneself clear as to what is meant by the terms mentioned, the best method is to define them in the briefest manner possible.

Form: Ideal form is that which most closely approximates certain ideals which the judge has in mind of a perfect specimen of the variety of flower which he is judging. For instance, a rose of perfect form should have symmetry, certain uniformity in the arrangement of petals, together with either length of bloom or width of bloom, according to the class to which it belongs, and a few other characteristic features.

Color: Certain varieties have characteristic colors, and any specimen which does not show true has to be disqualified by the judge. A perfect color has been defined as one which lasts for a long time without fading and which is rich and attractive rather than dull. Some red flowers in particular have a habit of fading out, very soon after they are full bloomed, to a very displeasing shade of magenta. It is necessary, therefore, that flowers which are too full bloomed should not be selected.

Size. As a rule, size indicates a certain amount of cultural skill and successful care on the part of the exhibitor. Size, however, in some cases may not be a desirable characteristic. This statement, however, may be more true in connection with fruits than with flowers. Large-sized flowers, other things being equal, stand a better chance of winning the prize. With

fruits, the reverse may be the case, as those of large size may be too poor in quality.

Condition: Condition may be briefly described as relating to the vigor and freshness of the flower. It must not be too open and must be free from blemishes, which point has already been referred to.

Substance: Substance is very often an important quality in a flower. For instance, a rose of good substance is always favored by a judge in preference to one which has thin petals and consequently becomes flabby and shapeless. The same remark is also true with regard to many others.

Fragrance: Fragrance is a point which the judge only considers in connection with certain fragrant kinds of flowers. For instance, fragrance would not be a point considered in asters and gladioli. It may, however, be of considerable importance in an exhibit of roses.

Uniformity and setting up: Uniformity with flowers, as with fruits or vegetables, is something that no exhibitor can afford to overlook. He must in all cases choose specimens which are uniform in all respects. It is of little use for an exhibitor to think that by putting two or three abnormally large specimens in with the others, the exhibit will be benefited by so doing. On the contrary, the fact that the five or six specimens, as the case may be, are not uniform will detract considerably, and the judge may not observe it further than to note that the specimens are not uniform and are not therefore in the running.

—*Canadian Florist.*

AMERICAN ROSE SOCIETY.

Committees Appointed by President Pyle.

The Executive Committee of the American Rose Society recently held a meeting in New York. F. L. Atkins, chairman of the committee to outline a policy in regard to the establishment of rose test gardens, has made a preliminary report. It was the opinion of the committee that the official rose test gardens should be established only in certain climatic zones. The Department of Agriculture at Washington is working on a zonal map of these sections. It was also the opin-

ion of the committee that the American Rose Society should recognize any show gardens in public parks or public gardens, provided they are kept to a certain standard of excellence.

S. S. Pennock, chairman of the committee appointed at the last meeting to formulate a plan for the dissemination of Dr. Van Fleet's seedlings, made a report of progress. He read a letter from Professor L. C. Corbett of the United States Department of Agriculture, proposing such a plan.

It was voted to instruct the committee to arrange with the authorities of the Department of Agriculture at Washington for the testing of Dr. Van Fleet's seedlings in all the official rose test gardens of the society with a view to future dissemination.

The following committees were named by President Pyle and confirmed by the Executive Committee:

Central Committee of the Rose Test Gardens: J. F. Huss, Hartford, Conn.; Dr. A. C. Beal, Ithaca, N. Y.; Theodore Wirth, Minneapolis, Minn.; J. A. Currey, Portland, Ore.; Charles E. F. Gersdorff, Washington, D. C.; Professor N. M. McGinnis, College Station, Texas.

Arlington Rose Test Garden, Washington, D. C.: Charles E. F. Gersdorff, Washington, D. C.; A. F. Greeley, Washington, D. C.; Miss Carrie Harrison, Department of Agriculture, Washington, D. C.

Hartford Rose Test Garden, Hartford, Conn.: J. F. Huss, Hartford, Conn.; George A. Parker, Hartford, Conn.; Alexander Cumming, Jr., Cromwell, Conn.

Cornell Rose Test Garden, Ithaca, N. Y.: Dr. A. C. Beal, Ithaca, N. Y.; D. E. Griffin Lewis, Syracuse, N. Y.; Charles G. Adams, Auburn, N. Y.

Portland Rose Test Garden, Portland, Ore.: J. A. Currey, A. J. Clark and Alfred Tucker, Portland, Ore.

Rose Registration: Robert Simpson, Clifton, N. J.; W. R. Pierson, Cromwell, Conn.; George H. Peterson, Fairlawn, N. J.

It was moved and carried that a committee be appointed to foster in every way the cut-flower rose interests. The following committee was named and confirmed: W. R. Pierson, Cromwell, Conn.; Harry O. May, Summit, N. J.; S. S. Pennock, Philadelphia, Pa.; Max Schling, New York City; Henry Penn, Boston, Mass.

The report of the committee on rules and regulations governing the exhibition of garden roses was adopted.

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NURSERYMEN'S COMMITTEES.

The various committees of the American Association of Nurserymen have been nearly completed. The list as it now stands is as follows:

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J. Edward Moon, Chairman, Morrisville, Penna.; Lloyd Stark, Vice-President, Louisiana, Mo.; E. S. Welch, Shenandoah, Iowa; J. B. Pilkington, Portland, Oregon; T. B. West, Perry, Ohio; E. W. Chattin, Winchester, Tenn.; C. C. Mayhew, Sherman, Texas; C. R. Burr, Manchester, Conn.

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Chairman not yet selected, Robert Pyle, West Grove, Pa.; Frederic Atkins, Rutherford, N. J.; Ernest F. Coe, New Haven, Conn.; O. Joe Howard,

Pomona, N. C.; Earl D. Needham, Des Moines, Iowa.

Arbitration Committee.

George A. Marshall, Chairman, Arlington, Nebr. The rest of this committee not yet agreed upon.

Vigilance Committee.

Paul M. Lindley, Chairman, Pomona, N. C.; James A. Young, Aurora, Ill.; Will Harrison, York, Nebr.; E. P. Bernardin, Parsons, Kansas; F. S. Baker, Cheshire, Conn.

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Harlan P. Kelsey, Chairman, Salem, Mass.; J. Horace McFarland, Harrisburg, Pa.; Committee not yet completed.

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BOSTON ORCHID AND VEGETABLE SHOW.

Although announced as a vegetable and fruit show, the outstanding feature of the exhibition at Horticultural Hall last week was the orchid exhibit of A. C. Burrage. The exhibit was staged by itself and was greatly admired.

The fruit and vegetable show was good, although not quite as large as expected because of the rainy weather during the past few weeks.

THE AWARDS.

List of awards made at the Fruit and Vegetable Exhibition of the Mass. Horticultural Society, Sept. 25 to 28, omitting the awards made for single plates of fruits and vegetables.

Awards for Fruits.

Prizes offered by the Mass. State Department of Agriculture. For fifty Gravenstein Apples: 1st, Dexter T. Dodd. For fifty McIntosh Apples: 1st, Dexter T. Dodd; 2d, Parker Bros. For fifty Apples, any other variety: 1st, Parker Bros., Blue Pearmain. Collection of Pears, eight varieties, twelve of each: 1st, F. W. Dahl.

Collection of Pears, four varieties: 1st, Edward A. Clark; 2d, Edward B. Wilder. Peaches, three varieties, twelve specimens each: 1st, George V. Fletcher; 2d, Parker Bros. Marshal P. Wilder Fund. Grapes—Collection, six varieties: 1st, John Bauernfeind; 2d, W. G. Kendall. First Class Certificate of Merit: H. A. Cook, native seedling Grape No. 3 (King Philip, Warden).

Awards for Vegetables.

Prizes offered by the Mass. State Department of Agriculture. Collection of Salad Plants, twelve varieties: 1st, James A. Neal; 2d, Edwin L. Lewis. Collection of Vegetables, eighteen varieties, arranged for effect: 1st, Edwin L. Lewis; 2d, James A. Neal; 3d, J. A. Nixon. Collection of six varieties: 1st J. A. Nixon; 2d, Edward A. Clark. Benjamin V. French Fund. Cereals, one-half bushel Wheat: 1st, T. D. Hatfield. One-half bushel Oats: 1st, Faulkner Farm. One-half bushel Winter Rye: 1st, Faulkner Farm. Silver Medal: R. D. McLean, superior cultivation of Onions; T. J. Grey Co., collection of vegetables.

Awards for Flowers.

First Class Certificate of Merit: A. C. Burrage, Cypripedium Sir Redvers Buller; A. C. Burrage, Cattleya Harold. Gold Medal: A. C. Burrage, exhibit of Orchids and Foliage Plants.

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Telephones: 2300, 2301, Madison Square.

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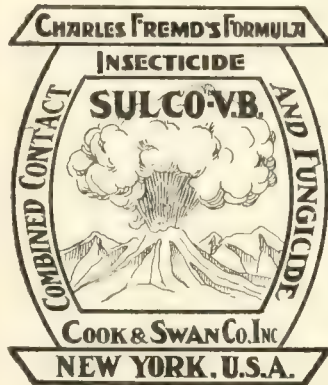
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Geo. H. Frazier, Mgr.

ROCHESTER HAS LESS SUNLIGHT THAN OTHER ROSE GROWING CENTERS.

At a meeting of the Rochester Rose Society, Colin Odston spoke on "Can Rochester Compete with Other Rose-growing Centers?" Mr. Odston, who has made a life study of flowers and has been gardener for Mrs. Laura M. Kimball for a number of years, gave in his talk both the favorable and the unfavorable side of the subject.

The sunlight in Rochester, the speaker said, is poorer than in any other rose-growing center. The time when it is needed most, the months of December and January, we have the least of it. He told of a little instrument used to record sunlight and gave the average records of the instrument for a period of ten years. In Rochester the winter sunlight is but 54 per cent. of what we should get. In spring it is 56 per cent., in summer 59 per cent. and in autumn 54 per cent.

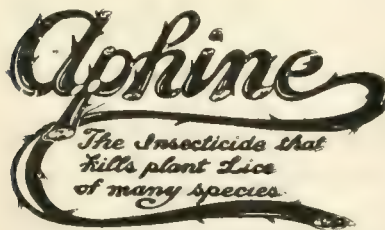
To get this average the sunlight is measured each day from sunrise to sunset. Cloudy weather, snow and rain cause much of the light to be lost. The speaker also told of various methods he used to grow the best roses. At the conclusion of his talk he answered queries asked by members of the society. President John E. Dunbar of the society was prevented from attending the meeting and his place was taken by the vice-president.

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It would keep your name and your specialty before the whole trade.
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The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.

Quart, \$1.00; Gallon, \$2.50.

FUNGINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.

Quart, \$1.00; Gallon, \$2.50.

VERMINE

For eel worms, angle worms and other worms working in the soil.

Quart, \$1.00; Gallon, \$3.00

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Have your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to direction, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

½ Pint, 30c.; Pint, 50c.; Quart, 90c.;
½ Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00.
Directions on package.

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World's Oldest and Largest
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FLORIST SPECIALTIES
New Brand New Style
'RIVERTON' HOSE

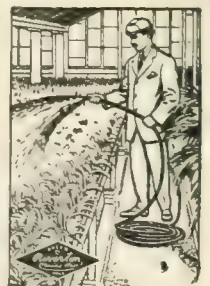
Furnished in lengths up to 500 ft. without seam or joint.

The HOSE for the FLORIST

¾-inch, per ft., 19 c.
Reel of 500 ft. " 18½ c.
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Drive easy and true, because both bevels are on the same side. Can't twist and break the glass in driving. Galvanized and will not rust. No rights or lefts. The Peerless Glazing Point is patented. No others like it. Order from your dealer or direct from us.

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No. 2

How to Keep the Greenhouse Heating System PERFECT this Winter

WHEN you start the heating system this winter you may find water dripping from small leaks or cracks in the boiler.

Putting off the repair may mean serious trouble later with heavy bills to face.

The proper thing to do is to pour "X" Liquid into the boiler now. This will repair the leaks—and prevent new ones.

"X" is a marvelous liquid. When poured in the boiler it instantly combines with the water. In sizzling out through the leak or crack the "X" is changed by the oxygen in the air from a liquid into a solid, thus repairing the break.

The heat in the boiler then hardens this repair, making it as tough as metal so that it will stand over 2,000 pounds pressure.

The surplus "X" being left in the system automatically stops all new leaks which may develop due to expansion, or from other causes. In this way "X" makes the boiler (and in a hot water system the entire system) LEAKPROOF. Keep "X" always in the water and you will never have trouble from leaks, cracks, rust or scale.

"X" Eliminates Rust and Scale. Saves Coal

"X" positively prevents all metal from pitting and rust. It eliminates scale in the boiler by chemically preventing the lime and other scale-forming matter in the water from crusting on the boiler walls. In this way "X" Liquid makes the boiler RUSTPROOF and SCALEPROOF.

Greenhouse owners who use "X" Liquid report a gratifying saving in coal and greatly increased heating efficiency.

"X" Liquid is the surest and most economical method, of repairing boilers. It is used by the United States Government, by thousands of apartment house owners and is recommended by over 28,000 plumbers who use it regularly.

If you want to do the job yourself get a can of "X" Liquid. Otherwise ask your plumber to do the job. His charges will be very reasonable.

The main thing is that "X" Liquid may save you thousands of dollars in an emergency. It is wise to keep "X" Liquid always on hand.

Unconditionally Guaranteed!

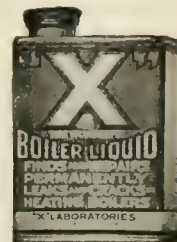
"X" will make good on any leaky or cracked boiler job—or we will return your money. You take no chances. "X" contains no cement, powder or other injurious substances. Beware of imitations which cannot do what the genuine "X" Liquid does.

1 Quart \$6 in the U. S. A.

2 Quarts \$10 in the U. S. A.

Get "X" Boiler Liquid from your steamfitter—or we will ship direct, postage prepaid, on receipt of price.

"X" Laboratories, 33 W. 45th St.
NEW YORK CITY



NEWS AND COMMENT

NEW ENGLAND

Dr. Jacob K. Shaw of the Massachusetts State College has accepted an appointment as head of the Department of Horticulture in West Virginia University.

New greenhouses to be erected for Albert C. Burrage in Hart street, Beverly Farms, will be built from plans by William Chapman of Boston. One building will be 50 by 17 feet in size, four 58 by 18 feet; three, 68 by 18; one, 21 by 18 feet, and one 148 by 18 feet. The materials of construction will be steel, glass, cement and wood.

The new greenhouse which William Paul has added to his range at Chicopee is to be devoted to carnations.

Mr. Gustave Thommen is the new representative of The Florists' Exchange in this territory, taking the place of Robert Cameron, who is now at Ipswich

BOSTON.

The Boston Florists' Association will hold its first meeting of the season

next Tuesday evening at the Parker House and it is expected that there will be a large attendance. The speaker of the evening will be Mr. Hicks of the Retail Trade Board of the Boston Chamber of Commerce.

A handsome metal canopy over the front entrance of the Penn Store on Tremont street adds greatly to the appearance of the already very attractive establishment. An arrangement of alternating colored lights calls attention at night to the words "Say It With Flowers," which stands out very conspicuously. It is a very interesting fact that according to Henry Penn, this new feature of the store cost three times as much money as the capital on which the concern started business.

Another batch of bulbs for local dealers has just come in and good sales are reported. There is every evidence that all the stores will clean up, despite the high prices. As a rule the stocks have been a little heavier than last year.

PHILADELPHIA.

Among the top-notchers of the finer dahlias now coming in in quantity to the commercial cut flower market, Princess Juliana stands high among the whites and Minnie Burgle about equally strong at the other color extreme—the dark reds. In the in between colors—pinks, yellows, bronzes, etc., Attraction, Sequoia, Crystal, Mrs. C. H. Breck, H. Fiet, Crepuscula and Biana are especially notable. The market was generally satisfactory last week, the demand for good dahlias and other high grade stock being very good. Asters are on the wane and carnations are beginning to take their place. Smith's Advance and Golden Glow seem to be about the only chrysanthemums so far. Cattleyas more plentiful.

The Michell forces and others in the business are mourning the loss of a bright young man who passed away rather suddenly on the 26th ulto. He was W. J. Stokes and was an outside man for the firm for the past three years, his territory being mostly along the main line. A widow and two children survive him.

Recent Philadelphia visitors include: C. W. Roe, Easton, Md.; Judge Savidge, Lewisburg, Pa.; A. W. D.

THE BOILER OF Unequalled Fuel Economy

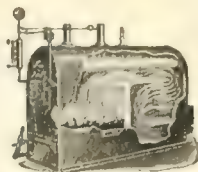
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THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

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No Masonry—No Tubes



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Kroeschell Bros. Co., 466 W. Erie St.
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When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

Evans, Wilkes-Barre, Pa.; Harry Heck, Wyomissing, Pa.

BOLGIANO TRUCKS WON FIRST PRIZE.

J. Bolgiano & Son's fleet of automobiles were the prize winners for the best decorated fleet in Baltimore's big auto parade which was held Saturday, Sept. 20th. There were about 1600 trucks in line. Bolgiano's garden float which led their fleet was very unique. It was composed of an exact miniature growing garden and contained Asparagus, Beans, Carrots, Lettuce, Beets, Cabbage, Endive and Tomatoes laid off in rows and actually growing. The tomato vines showed quantities of luscious rosy red fruit. Flowers were not overlooked as one corner of the garden was devoted to flowering plants all out in full bloom. Working the garden was an attractive young lady attired in the garb of a farmerette assisted by a

farmer boy who was wheeling a wheelbarrow filled with vegetables which he had presumably just picked from the garden. The front of the truck was beautifully decorated with flowers and vines.

The garden float was followed by one showing an immense poultry house and a Rooster so large that he looked suspiciously human. He even shimmyed to the amusement of the spectators, but it seemed he could not crow.

Each department of Bolgiano's Seed Store was advertisingly represented by one of their trucks in the fleet. A large two ton truck carried a full load of Poultry Food and following this came a truck with coops of live poultry with the inscription "Results of feeding Bolgiano's 'Square Deal' Poultry Foods." Other trucks followed displaying articles of interest to the Poultryman, and also Lawn Grasses, Implements and Fertilizers for Lawn and Window Boxes, Palms, Ferns, and Bulbs for home decoration.

A cider mill filled with apples turning out sweet apple cider attracted attention.

Bolgiano also competed in the contest for the best slogans for the use of motor trucks for local and long distance hauling with the following slogans:

"We auto deliver and we do." and
"Autos put the 'Dust' in Industry."

ROCHESTER.

Charles Curtice of Summerville Blvd. is growing some very good orchids and hardy gypsophilla. He has cut his first chrysanthemums and has a promising crop of dahlias.

Salmon the florist of Mt. Hope Ave. is cutting some very fine dahlias and gladiolus.

CHICAGO.

The appearance of the early white chrysanthemums in the Chicago market and the fast disappearance of the asters mark the pressure of the Fall season. Chilly winds are driving the owners of summer houses back to the city and florists are noting a picking up of flower sales. Cheap summer flowers are almost gone and with carnations still scarce the demand for roses is sufficient to use up what would ordinarily be a good supply. Just now fancy Russells reach to 40c., Columbia to 25c., Premier to 25c., Ophelia to 12c. and Killarney to 10c.

With the opening of the Fall season the Chicago Florists' Club will resume the regular monthly meetings which are the first Thursdays after the first Monday and this time falls on Oct. 9th, known as Chicago Day or the anniversary of the great fire of 1871.

One of the well known retail florists of the down town district, Oscar J. Friedman, has sold his store at 520 S. Michigan avenue and another known as the Ohio Floral Co. at 500 S. Wabash avenue to T. C. Fogarty & Co.



One of the Bolgiano Trucks in the Baltimore Parade

WE ARE SPECIALISTS IN GREENHOUSE GLASS

Free from Bubbles
Uniform in Thickness

PAINTS and PUTTY

Greenhouse White

(Semi-Paste) The
Paint Particular
Florists Prefer

It will pay you to get our estimates.

THE DWELLE-KAISER CO.

251 Elm Street

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For Greenhouse
Glazing
USE IT NOW
F. O. PINNOC CO.
12 W. BROADWAY
NEW YORK

Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Lasts longer than putty. Easy to apply.

USE WIZARD BRAND CONCENTRATED PULVERIZED MANURE

Pulverized or Shredded
Cattle Manure

Pulverized

Sheep Manure

The Florists' Standard of uniform high quality for over ten years. Specify: **WIZARD BRAND** in your Supply House Order, or write us direct for prices and freight rates.

THE PULVERIZED MANURE CO.
34 Union Stock Yard, Chicago

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Does Kill Them. Ask for Prices.
PERFECTION CHEMICAL CO., INC.
151 H Washington St., Flushing, N. Y.

ASPARAGUS PLUMOSUS

Asparagus plumosus seedling: \$1.00 per 100; \$6.00 per 1,000. **ALFRED M. CAMPBELL**, Strafford, Pa.

BULBS

C. KEUR & SONS, HILLEGOM, Holland.
Bulbs of all descriptions. Write for prices.
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For the best Up-to-Date Cannas, get new price list. **THE CONARD & JONES CO.**, West Grove, Pa.

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Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c; 3000 for \$1.00 post-paid. **I. L. PILLSBURY**, Galesburg, Ill.

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Peony Dahlias Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. **JOHN P. ROONEY**, New Bedford, Mass.

New Peony Dahlia—John Wanamaker, Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to **PEACOCK DAHLIA FARMS**, Berlin, N. J.

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Daisies, Bellis, Monstrosa, pink or white, also Long Fellow and Snowball, fine strong plants, \$3.00 per 1,000, \$8.25 for 3,000. **CASH. BRILL CELERY GARDENS**, Kalamazoo, Mich.

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Delphiniums. All who have seen my Delphiniums pronounce them as fine as ever they have seen. Write for trade list. **WILLIS E. FRYER**, Mantorville, Minn.

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Boston ferns out of the bench ready for 6 in. and 8 in. pots. Come and see the stock and for prices. **J. H. FIESSER**, North Bergen, N. J.

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Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2½-inch pots at \$15 per 100—larger quantities on application. **J. H. FIESSER**, 711-741 Hamilton Ave., North Bergen, N. J.

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Pansy Plants, strong and stocky, "Superb Strain, \$4.00 per 1,000, 3,000 for \$11.25, 5,000 for \$17.50, cash. These plants and strain will please you. **BRILL CELERY GARDENS**, Kalamazoo, Mich.

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Good strong stock from 2½ in. pots
\$6.00 per 100, \$55.00 per 1000.
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Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. **J. H. TROY**, Mount Hissarlik Nursery, New Rochelle, N. Y.

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SPECIAL WIDTH HOUSES COST MORE

COST MORE, because they **cost more to make**, than Standard widths. If they cost us more, they will cost you more. The more they cost, according to that way of figuring, the more we make.

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So, based on the opinions of the leading growers of the country, combined with our experts, we decided on 6 widths of houses that work out most economically as to both benches and cost of materials.

You may not think they are the most economical for you, but after we have sat down with you and explained the entire matter, we have a notion things will look very different.

The new Handy Hand Book both shows and tells about all the Standard widths. If you haven't a copy, send for one. If you have one, be sure it's not an old one. The new one says "1918 edition" on the second page.

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HORTICULTURE

Vol. XXX

OCTOBER 11, 1919

No. 15

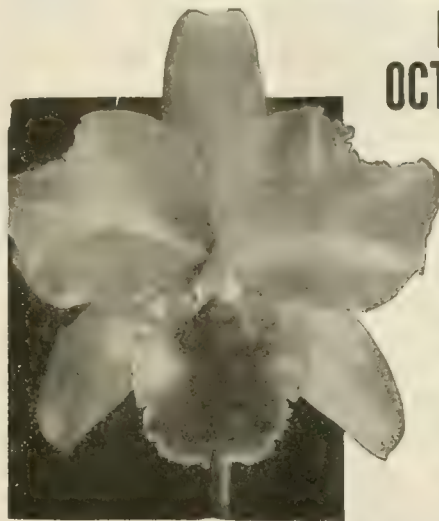
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CATTLEYAS, light and dark.
SPRAY ORCHIDS, also a few white.
VALLEY in limited quantity.
SWEET PEAS, White, Pink and Lavender. \$2.00, \$3.00 per 100.
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DAHLIAS, Fancy Varieties at \$8.00, \$10.00, \$12.00 per 100.
Plenty of others, good quality too, at \$3.00, \$4.00 and \$6.00.
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THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we **RECOMMEND IT MOST HIGHLY.**"

Strong plants, 2½-inch pots.....\$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots..... 7.50 per dozen, 50.00 per 100
Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:		Each
Elegantissima, elegantissima compacta, and Muscosa, 3½-inch		\$0.35
Elegantissima and elegantissima compacta, 6-inch		.75
Muscosa, 5-inch		.75
Elegantissima and elegantissima compacta, 8-inch		2.00
Elegantissima and elegantissima compacta, 10-inch		4.00
Harrisii, 8-inch		3.00
Dwarf, Boston, 8-inch		2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown. N. Y.

FERNS

Boston and Scottii, pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

5-inch \$4.80 per dozen — \$35.00 per 100

Alyssum Giant Double, Heliotrope, Lantanas, English Ivy, Swainsona, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts. For immediate shipment from 2-inch pots **\$2.50 per 100, \$22.50 per 1,000.**

Hardy English Ivy, Double Giant Alyssum, strong plants from 3-inch pots, **\$3.50 per 100.**

Coleus Brilliancy or Christman Gem, 2-inch, **\$3.00 per 100.**

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R. Vincent, Jr., & Sons Co.

WHITE MARSH, MARYLAND

2 Yr. Field Grown Teas and H.T. Roses

Ophelia, White Killarney, Pink Radiance, Red Radiance, Sunburst, Prima Donna, Pink Cochet, White Cochet.

Fine Plants Ready for Shipment in October and Later
\$35.00 Per 100

2 and 3 Year Field Grown: Tausendschon, Baby Rambler, Excelsa, Pink Dorothy Perkins, White Dorothy Perkins \$45.00 per 100.

1 Year Field Grown: Excelsa, Dorothy Perkins, and others, at \$20 per 100.

C. U. LIGGIT, ^{Office} 303 Bulletin Bldg. Philadelphia, Pa.

FALL BULBS

PAPER WHITES, 12-15, 13-15 and 14-16c/m

VALLEY PIPS (Holland grown)

BEGONIA AND GLOXINIA BULBS

DUTCH BULBS, JAP. LILY BULBS

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Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery.

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Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.

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With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

“Seeds with a Lineage” All Varieties
Thoroughly tested at our trial grounds, Raynes
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CARTERS TESTED SEEDS, Inc. 166 Chamber of
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IF in need of RELIABLE NURSERY STOCK

that is well grown, well dug and well packed

Send to the BAY STATE NURSERIES

Wholesale and Retail

NORTH ABINGTON, MASS.

When writing to Advertisers kindly mention Horticulture

THE F. T. D. AT BUFFALO

Early Reservations for Next Week's Meeting Are in Order.

The meeting of the F. T. D. at Buffalo, Oct. 14 and 15, will be an important one and doubtless will be largely attended. The city will be filled with people and early reservations will be required if rooms are to be obtained at the Iroquois. This is emphasized in the following note from Wm. F. Gude:

“I have been asked by the Hotel Management of the Iroquois to advocate two in a room as much as possible for our forthcoming meeting, which is to be held the week of the 13th. This is done on account of the unusual crowding of the hotels. After the experience in Detroit we can see the wisdom of putting even three in a room rather than stand all day waiting for an assignment.”

The Iroquois is the official Hotel and reservations for hotel accommodations can be made through S. A. Anderson, chairman of Hotel Committee, 440 Main street.

STATEMENT OF OWNERSHIP, MANAGEMENT, ETC., OF HORTICULTURE

As Required by the Act of Congress
Aug. 24, 1912.

Publisher—Horticulture Publishing Co., Boston. Editor and Business Manager—E. I. Farrington. List of stockholders holding one per cent. or more of total amount of stock—Estate of W. W. Castle, N. F. Perkins, Estate of Wm. J. Stewart, Ralph Messinger, J. K. M. L. Farquhar, P. Welch, Estate of David Welch, of Boston, Mass.; Estate of F. R. Mathison, Waltham, Mass.; Thos. Young, Jr., W. F. Sheridan, F. H. Traendly, Chas. Schenck, John I. Raynor, New York City. Estate of W. F. Kasting, Buffalo, N. Y.; A. S. Burns, Elmhurst, N. Y.; Wm. S. Person, S. S. Pennock, John Burton, Philadelphia, Pa.; Estate of Carl Jurgens, Newport, R. I.; Philip Breitmeyer, Detroit, Mich.; Fred Lautenschlager, Chicago, Ill.; bondholders, mortgagees and other security holders—none.

Sworn to and subscribed before
Notary Public by

E. I. Farrington,
Business Manager.

Boston, October, 1919.

When Writing to
Advertisers Please
Mention
HORTICULTURE

Henry H. Barrows FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.

ADRIAN, MICH.

Snow Queen Canna
Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The CONARD & JONES CO. WEST GROVE PENN., U.S.A.

Robert Fyle, Pres. Antoine Winter, Vice-Pres.
We are subscribers to the Nurserymen's Fund for Market Development

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Simple method of correct accounting especially adapted for florists' use.
BOOKS BALANCED AND ADJUSTED
40 STATE STREET . . . BOSTON
Telephone Main 58

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 415, DUNDEE, ILL.

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

ROSES UNDER GLASS

By ARTHUR RUZICKA

The Night Temperature

Keep your eyes on the thermometer every night now, for although we have had warm, even hot weather, there have been some cool nights, near frost, and to have the roses without any heat, or to close the ventilators down to keep the houses warm will spell disaster. With the warm days of October the temperature often runs way up to 90 in the day time, even with full air on. Then to have the thermometer drop to below 60 nights makes too much of a change, and mildew will almost surely start in. Never let the houses go below 64 nights, with plenty of air on, especially on the larger houses, and new houses that are tight. Also do not neglect to have a little heat in as soon as the temperature goes to 66.—Very little to be sure, one pipe with as little pressure as is possible to have and still insure circulation. Make sure of this, for often it will happen that the pipes will be hot from both ends, and be perfectly cold all through the center of the house, making mildew start in just as sure as can be. As soon as the heat is turned on, apply sulphur to the pipes, a little here and there at about ten foot intervals. This should be done whether any mildew is showing or not, for it will quickly kill any that may be lurking among the plants waiting for ideal conditions to break out in full force.

Dusting Sulphur on the Plants.

Should a little mildew appear here and there, and it be too warm to use steam and sulphur on the pipes to exterminate it, a little sulphur mixed about half with finely screened air slacked lime and dusted on the plants will help hold it in check and will kill it as soon as the warm sun hits the plants. Do not apply too much of it if the plants are on crop, with a lot of buds showing color, for it will surely bleach the buds. Do not make any attempt to close the house at any time during the day for more harm than good will result from such treatment.

Liming the Benches

Watch out for sour soil in benches that were planted very early, and as soon as the plants seem to be a little off color, and the benches refuse to dry out readily, a dose of lime will open up the soil, sweeten any acidity, and tone up the plants in general. See that the plants are a little on the

JUST RECEIVED HOLLAND BULBS FREESIA PURITY ¾ INCH UP

Prices on Application

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53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON SPECIALIZE IN SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

DUTCH BULBS PAPER WHITES JAPANESE LILIES

Write for prices

AMERICAN BULB CO.

172 N. Wabash Ave., Chicago, Ill.

Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY SEEDS, BULBS AND IMPLEMENTS WHOLESALE AND RETAIL

Reselected Strains in Seeds.
Improved styles in Implements
Catalogue upon application.

16 So. Market Street
BOSTON, MASS.

When writing to advertisers kindly
mention HORTICULTURE

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium. Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.



Sim's
Yellow Polyanthus
The Best on the Market

Winter flowering clumps
ready now.

\$8.00 per 100 \$75 per 1000

L. J. REUTER CO.

PLANT BROKERS

329 Waverly Oaks Road
Walham, Mass.

SEEDS AND BULBS
Boddington's

128 Chambers St., N. Y. City

BOBBINK & ATKINS
NURSERYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's Fund for Market Development, also "Say It With Flowers" Publicity Campaign.

GARDEN SEED

BEEF, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

S. D. WOODRUFF & SONS
82 Dey St., NEW YORK and ORANGE CONN.

BURNETT BROS.
Seeds, Bulbs, Plants
Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

W. E. MARSHALL & CO.
SEEDS, PLANTS AND BULBS
Horticultural Sundries
166 W. 23rd St., NEW YORK

dry side when the lime is applied. Then it can be rubbed in a little, being very careful not to scratch too deep so as not to tear up the roots that are near the surface. Following this a good watering will carry the lime down where it will do the most good. After this the plants can receive feed and regular treatment as soon as they begin to grow nicely. Should the plants be badly cut off, it will be well to go over them and see that there is a little wood left on each one, pinching here and there if necessary.

Blackspot.

Watch out for blackspot, especially among the Beauties, and as soon as there is a sign of the least little bit, see that it is picked off, and proper precaution taken to check its spread. Give the plants the very best of culture, and spray them with copper carbonate, the ammoniacal mixture using about two ounces of copper carbonate with ammonia enough to dissolve it in two gallons of water. Apply with a fine nozzle on a clear day when there is plenty of air on. When applying the mixture be sure to reach in among the plants well so that the material will reach the foliage which is most likely to suffer. Keep the plants on the dry side a little while, and watch for drip from leaky roofs or stopped up drip grooves. Slipped glass will also let in a lot of water just where it is least welcome. With spot on the Teas it is much the same only they will harden up and stop growing if they are kept on the dry side too long. Beauties will do the same, but it shows at once and this is not true with the Teas. They will slip back so gradually that the damage is done before a person is aware of it. Plenty of fresh air, even at the expense of a little coal and good clean culture will do wonders to rid the plants of spot.

Shaking Plants After Syringing.

With the fall months here now, and the days ever getting shorter, it will be necessary to shake the plants well right after each syringing to insure their drying off before night. Never should the plants remain wet over night, and syringing should always be done early in the morning as possible, so that the plants will be fairly dry by noon, this giving them ample time to get dry by night. If the night happens to be cool, keep a little more air on than is customary, and it would be well to keep the houses a degree or two warmer, but with air on, otherwise the plants would be apt to get soft. This must be avoided for soft plants will get mildew very easily, and will not give the quality of cut roses that good hardy plants will.

PURITY
FREESIAS

A fine lot of bulbs from a late dug, well ripened crop has just been received from our grower. Freesias are a splendid late winter crop, and now is the time to plant to bloom them. Easily grown, with little or no trouble. Better play safe and let us send you a thousand.

PRICE, FIRST SIZE BULBS

\$10.00 per 1000; per 100, \$1.25

Will send them packed post insured at this price if you mention it at the time of ordering. Make no mistake, you will be pleased with these bulbs.

Also all Other Seasonable Bulbs,
Seeds and Supplies.

NEW GIANT COLORED
FREESIAS

These varieties are equal to the "Purity" in size; have excellent form and splendid texture.

	Doz.	100	1000
BLUE	\$1.25	\$8.00	\$75.00
LAVENDER	1.25	8.00	75.00
PINK	1.25	8.00	75.00
MIXED. All colors.	.75	5.00	40.00

Send for New Wholesale Price List, if you do not receive a copy.

MICHELL'S SEED HOUSE

518 Market St., Philadelphia

JUST OUT

BOLGIANO'S 1919 SUMMER AND FALL
CATALOG OF "BIG CROP" SEEDS

Special Prices for

Florists and Market Gardeners.

Write for a copy at once—it will save you money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.

STUMPP & WALTER CO.

Seeds and Bulbs

30-32 Barclay Street
NEW YORK CITY

SEEDS, BULBS, PLANTS
JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time.

Circulars and other information will be mailed on application.

The New York Botanical Garden
Bronx Park NEW YORK CITY

HORTICULTURE

Vol. XXX

OCTOBER 11, 1919

No. 15

THE TALK OF THE TRADE

What is wrong with our California Freesias? The bulbs looked fine when they were delivered, but the growth has been a decided disappointment to quite a number of growers. They have started very unevenly and for pot and pan purposes this is a great drawback. One grower I visited recently had pans with growth ranging from four to ten inches in height, and a pan of Freesia to be good must stand even and finish its flowers all at the same time. It doesn't seem to be at all the fault of the growers, as the trouble seems to be general. Were the bulbs dug too early, or is there some other reason?

I understand that Peter Fisher has received orders for over 50,000 rooted cuttings of his new carnation Ethel Fisher, which started out as Red Cross. The name is the least important point apparently. What counts is the quality of the flower, and this new carnation seems likely to prove highly popular.

Apparently the Patten Begonia is to have a good sale this season. Many growers seem to have it in 4, 5 and 6-inch pots and expect it to meet with high favor. It is well received by the buying public because of its high color. Naturally the M. A. Patten Co., of Tewksbury, Mass., has a large stock, but other growers are well stocked up, too. I have seen a good supply of plants at the establishments of Edward Norberg, North Cambridge, Mass., and that of A. M. Davenport.

There seems to be no reason why the oleander should not come into increasing favor. It has many things to recommend it and is not at all hard to grow if one keeps off the scale and mealy bug. It is a fine plant to use around estates and in parks and in cafes in the late Spring and early Summer. There is said to be considerable stock in the country and if I am not mistaken, a supply carried by two prominent Ohio concerns, Storrs & Harrison and Goode & Reese. There are stocks in the East, too. At least

W. W. Edgar, of Waverley, Mass., have a supply, and doubtless there are others.

Murray, the florist of New Bedford, has originated a unique advertisement which must have attracted no little attention. It appears in one of the local papers, and while it occupies only a single column, the eye is immediately caught by two finger prints at the top of the ad. These two prints make one think of a detective story or some thrilling piece of news, so that the eye inevitably follows down to the text. The display lettering is confined to the words "Finger marks of identification" and the rest of the matter runs right along into the smaller type which informs the reader that finger marks are not confined to the rogue's gallery alone, as the finger marks of the florist are an identification of good taste and refinement in the man who employs him. The location of handsome evergreens in barren places is the finger mark of the landscape gardener, covering bare underpinning, and the bedding of choice collections will be a source of satisfaction to the home maker as well as an adornment to his home all winter long. As a last persuasive appeal, the advertisement closes with the line, "Come to a decision right away, and leave it to Peter."

Penn of Boston is putting out a new street car card, which is perhaps the most novel thing of the kind yet conceived.

The card is neatly done in colors but is not overdone. It reads: Whose slogan is this? When you think of flowers, think of——." No name is given, but in its place there appears the cut of a long quill pen. Underneath the pen are the words, "Boston's Flower—Phone, etc.

Now there can be no doubt as to the novelty of this advertisement, neither can there be any doubt that the majority of native Bostonians who read it will immediately understand that it refers to Penn, the Florist. There will be a certain amount of advertising value, too. Yet the question must inevitably arise, "Is this the kind of

advertising which brings the maximum of results?" The most original and unique advertising does not always sell the most goods. It is a question, indeed, whether the greatest amount of business is not obtained by the simple and direct statement as to what one has to offer, what it costs, and where it can be obtained. Thousands of people come into Boston every day from other places. Many of them, as even Mr. Penn himself will admit, never have heard of the Penn store. Yet they may be prospective buyers. To such as these the Penn ad. will be useless. This frank criticism expresses, of course, only the writer's thought of the matter, based on his experience and observation. To be sure, Mr. Penn can safely do what many other florists could not, but in my opinion the best kind of general advertising for the average florist is an announcement which offers some special design, a novelty, or a particular inducement in the way of quality. Such an ad. commonly suggests a want which the reader of the advertisement did not feel before, and which will lead him directly to the advertiser's store.

BOSTON'S NEW STORE.

Hamlin's new store in the Little Building was opened this week, and Mr. Rogers received many congratulations on its appearance and especially on its equipment. Among the most noticeable features of the store are the flower chests with their massive glass doors. These chests are fitted with the Isko system of refrigeration without ice. It is understood that several orders have been placed by Boston florists for this system, but the one at the Hamlin store is the first that has been set up in Boston. For that reason it has been examined with much interest. The simple machinery is located in the basement and a thermostat gives perfect regulation. The refrigerant used is sulphur dioxide, especially treated. This is a harmless, non-inflammable gas which liquifies at low pressure. Cranks, pistons and connections are all eliminated. The system was installed in the store by the Boston agents of the Isko Co., which has its headquarters in Chicago.

ABOUT BILLBOARDS.

A Strong Letter from J. Horace MacFarland.

September 30, 1919.

Dear Sir:

To the inquiry in the September 27th number as to how I will "view the project of the Society of American Florists to put up billboards all over the country for advertising flowers," you need be in no uncertainty.

The project is an evidence, and a sad evidence at that, of the lack of business acumen within the controlling councils of the Society of American Florists at a time when the shrewdest and ablest advertisers are quitting the billboards. Because the billboards are no good for advertising purposes, good salesmanship on the part of the billboard concerns pulls over the "easy marks" who can be fooled by noise and spread and do not require to be "shown."

The idea of spending this money will be, of course, to improve the business situation of the florists who contribute it. Every other form of advertising known to man, even including that involved when the young doctor has himself called out of church in the middle of the sermon, is operated on the basis of tracing results, save only the billboard. A careful inquiry among large advertisers several years ago brought out the clear-cut statement that no one had ever been able to trace good results to billboards as advertising media save Burrowes, the fly screen man, and he only while his billboards had been maintained a quarter of a mile away from all other billboards. Most of the other advertisers who replied to this inquiry admitted they were getting out of that relationship and using other methods which were more profitable.

The theaters have quit mostly, and nearly all good business men have quit. Articles of which the advertising is not admitted in decent magazines are seen on billboards. "Say it with Flowers" gets into very dirty and unpleasant company when it joins with the fraternity who can't make a noise anywhere else than on the billboards.

I believe that there is less possible return for each dollar expended in billboard advertising by at least 50 per cent than for any other method of attaining publicity. If the Florists have scads of money and do not care who gets it, they are from the standpoint of the acute advertising expert of today, quite in line in blowing it on billboards.

But there is another side to this matter. The billboard is primarily an insult, and it is being so regarded by whole cities and by the courts. For

example, there has just been put into effect in Cincinnati an ordinance which permits the utter exclusion of billboards from residence districts by a majority vote of the populace. This follows similar action in Chicago. From that city the billboard interests appealed their case to the State Supreme Court and then to the United States Supreme Court, and they got what was coming to them in the highest court in the United States, which declares the billboard to be under the police power, to be subject to regulation in just the same fashion as the saloons were subject to regulation, and easily to fall under the designation of a public nuisance.

St. Louis has within the last ten years reduced its billboard area, by fighting through the courts a controlling ordinance, to less than one-fourth the announcements that used to line the streets of that active city. Here again the billboard humbugs fought clear to the United States Supreme Court, and their stupidity was successful in having that great law-construing body put the billboard in the nuisance class.

Los Angeles has recently taken a fall out of the billboard, and so has Milwaukee. All over the country cities are legislating against billboards.

Why is this? The answer is plain: Because the billboard is a nuisance, an annoyance, a damage to property, an insult to a beautiful land, an unfair and unpleasant twisting of a presumed constitutional privilege to do as one pleases with anything one can reach.

The billboard sells the eyes of the public, or thinks it does. Evidence is not wanting that at present the tide is turning so that the sort of publicity

NEW IMPROVED IRIS

	Single roots	
	per 100	per 12
CAPRICE, silky purple.....	\$6.00	\$.85
HER MAJESTY, best clear pink.....	6.00	.85
MONSIGNOR, velvety purple.....	10.00	1.40
LOHENGRIN, silvery mauve.....	10.00	1.40
QUEEN ALEXANDRA, new lavender.....	10.00	1.40
RHEIN NINE, white and raspberry.....	10.00	1.40
ISOLINE, opalescent blue.....	20.00	3.00
PARISIANA, mottled lavender.....	20.00	3.00

No order accepted for less than \$2.00. Not less than 6 of one kind at the 12 rate or less than 25 at the 100 rate. No charge for packing.

Send for catalogue of Peonies and Iris.

PETERSON NURSERY

30 N. LaSalle St., Chicago, Ill.

secured on the billboard is the same sort of unpleasant publicity that the booze-makers and booze-sellers got by combatting the movement against the saloon.

The gentlemen who are guiding the advertising campaign of the Society of American Florists have evidently mistaken notoriety for publicity and are running chances for reverse action in their efforts. Flowers must be sold to women more than to men. It is the women's clubs all over the land that are usually found in the lead against billboard intrusions, though latterly chambers of commerce and business bodies have had to fight against their activities. To be effective the billboard must be placed in a prominent position. It frequently shuts out a beautiful scene. In these days of community sanitation the old cry that the billboard hid objectionable conditions does not count, for we now know that no community dares, if it is to be a decent community, permit hogpens in the public eye or under the public nose. In fact, in the Chicago case the adverse decision to the billboard largely resulted because of the known capacity of the billboard for hiding filth, for promoting criminality, by affording opportunity to do illegal things, for bringing about fire danger, and for introducing another danger from storm. In every advanced community in these days the billboard is forced to keep at least three feet clear of the ground so that the stink back of it may be as easily noticed as the stink on it. To place "Say it with Flowers" in this association is quite as logical as it would be for the Society of American Florists to start a campaign to decorate every manure heap in the country with posters "Say it with Flowers!"

Not only is the proposition to waste the money of the florists subscribers to the publicity fund on billboards the worst sort of advertising, but it is likely, as I have said, because of the growing sentiment against the billboard, to have a reverse action and do definite harm to the people who are subscribing the money for other purposes.

Yours truly,

J. HORACE MCFARLAND,

Pres. American Civic Association.

"TELEGRAPH ORDERS."

Some Good Suggestions About Handling them.

The question of how to take care of the telegraph order business, is one of the most important subjects for general discussion that has entered into the florists business for several decades.

Since the inauguration of the relaying of orders from florist to florist by telegraph there has been, more or less trouble and very unfortunately will continue so, until a thorough campaign of education among retailers is established.

The taking of an order for delivery to another city while simple in itself, is very important insofar that it is necessary to get full details, particularly the correct name and address of the party that is to receive the flowers. So many mistakes are made by the carelessness of clerks and men who are engaged in the retail business in a small way. These mistakes are made mostly in sending orders to larger cities or the quickly growing centers of industry where there is a continual influx of new inhabitants; for illustration, take Dynamic Detroit, the fourth city, where the increase in population far surpasses the ability of the municipality to provide the necessary homes for its fast growing condition. It is nearly impossible to keep in touch with the new-comers. The constant changes in addresses of people in homes, apartments and hotels make it very difficult for delivery of flowers.

A suggestion by one of our members from the Pacific Coast is of immense value in this connection, which is as follows:—"I would like to place before you a very important suggestion and one on which I have had several complaints. When an order is received from one brother florist to the other for a box of flowers, to be

delivered to a party on a certain date at a hotel or residence or wherever it might be, it would be well to call up the hotel or residence in advance and ascertain if the party had arrived or when expected."

This would be of great value and of protection to the flowers, preventing their laying around for perhaps twelve or twenty-four hours.

Likewise with funeral orders, the day and hour should be ascertained, this would give the confirmation of same being correct and would certainly be a builder up of the efficiency of the F. T. D. service. Hence, the great importance of getting the correct address is quite obvious.

The retailer accepting the message should at all times be sure that he thoroughly understands the order, if in doubt have the telegraph company repeat message, if this does not prove satisfactory, wire the sender for verification of order, by following this method, many errors and serious mistakes would be avoided.

When we consider that this branch of the retail business has increased from a very nominal volume, to wonderful approximate total value of from one to three millions annually, one can readily understand the importance of creating or establishing a system of educational features whereby we may all learn and improve our methods of conducting the retail business. There is a wonderful future for the retail florist in the business of flowers by wire to all parts of the world. The earth's surface has hardly been scratched as yet along this line and I am optimistic enough to make the bold statement that the volume of business will reach ten millions of dollars in not any great distant future. It must be remembered however, that great things are accomplished only by supreme efforts and not by half-hearted or disinterested co-operation.

Many complaints come into the office of the Secretary of the F. T. D. of the carelessness and seeming negligence of members not acknowl-

edging orders immediately upon receipt of same, another will not send his statement for several weeks, while others pay absolutely no attention to complaints against them for mistakes on non-delivery of orders. These conditions exist and it is unmistakably wrong, hence the dire necessity of educational features.

The L. Bemb Floral Co. of Detroit has a very good system to overcome the many complaints for non-delivery. This form receipt is used principally for hospitals, hotels and apartment houses, where most of the mistakes are made. Its use, however, for all out-of-town orders is advisable. Its adoption or something similar would combat this evil. A reproduction of the following order will fully explain.

Received in good order from
("Driver") Buster Weber

of the

L. BEMB FLORAL COMPANY,
Albert Pochelon
153-155 Bates Street, Detroit, Mich.
Telephones—Main 2002-2003

on September 26, 1919 10.40 A. M.
Date and Time

the following order: Box of Roses
addressed to Mrs. Louis Ghirardelli,
care Mrs. S. R. Dennis,
205 Van Dyke Ave.

Signature, Mrs. S. R. Dennis.

The members of the F. T. D. who have the experience and adopted similar safeguards to overcome irregularities in business, would be doing a great good to enlighten the lesser lights of the retail business.

HORTI—THREE

There are a great many subjects that are continually being brought to light that should be expressed by the aid of printer's ink.

Trusting that the views expressed above will be the means of helping some doubting Thomases awakening them of the importance of flowers by wire.

M. BLOY,

F. T. D. Office.

ALL IMPORTED BULBS

DUTCH—FRENCH—JAPANESE

AT TRADE PRICES

Keep your Counter Display Alive

Nothing Better than Bulbs and None Better than Ours

Moderate cost. Big Profits. No Loss

Tulips, Hyacinths, Narcissus

Finest in Cultivation

Write for "Book for Florists"

43 Barclay St.
New York City

Vaughan's Seed Store

33 W. Randolph St.
Chicago, Ill.

HORTICULTURE

Established by William J. Stewart in 1904

VOL. XXX

OCTOBER 11, 1919

NO. 15

PUBLISHED WEEKLY BY
HORTICULTURE PUBLISHING COMPANY
 78 Devonshire Street, Boston, Mass.

EDWARD I. FARRINGTON, Editor.
 Telephone Fort Hill 3694

ADVERTISING RATES:

Per inch, 30 inches to page..... \$1.25
 Discount on Contracts for consecutive insertions, as follows:

One month (4 times), 5 per cent.; three months (12 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.

Page and half page space, not consecutive, rates on application.

SUBSCRIPTION RATES:

One Year, in advance, \$1.00; To Foreign Countries, \$2.00; To Canada, \$1.50.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

Boosting trade

At a recent bank opening in Boston the desks and counters were heaped high with flowers, making a display of such lavish character that it attracted no little attention and comment. The suggestion has been made that occasions of this kind offer an unusually good opportunity for florists to push their business. It is a noticeable fact that in some communities the sending of flowers when a new store or institution is opened is carried on to a large extent, while in other places very few flowers are seen. Now there is no reason why florists should not get this custom well established everywhere. It is mostly a matter of a good beginning. Oftentimes it would pay florists to send a decorative piece with their compliments. Others would see the flowers and on future occasions the thought would come to them to express their good wishes in the same way. There are many towns where more enterprising methods would do much to boost the trade of the local flower merchants.

10-cent store flowers

We notice that some of the ten-cent stores are again advertising flowers at the very low prices which they quoted in days before the war, although it is difficult to see how they can manage this with flowers as scarce as they are now. There are some men in the trade who seem frightened at ten-cent store competition and who believe that drastic methods should be adopted to eliminate it. In our opinion, on the other hand, every development of this sort is really an asset for the trade. It starts people buying flowers who have never bought them before. It inculcates a love for flowers and when these people become tired of the poor stuff which they get in the cheap stores, many of them will begin buying through the regular channels. In the end, therefore, the trade will be benefited. It is the same with street sellers. There may be times when they seem to cut into the trade of the stores, but in the end they make better business for all concerned.

New York strike

We regret that the strike in New York City has interfered with the regular issue of our esteemed contemporary, the *Florists' Exchange*. An experience of this sort upsets business routine and is disagreeable in every way, in addition to the fact that it cuts down revenues. At the same time, the situation was one which had to be faced and the publishers of the *Exchange*, along with those of the other New York magazines, are to be congratulated on their firmness as well as their fairness. Under present conditions, which are made doubly hard by the government's zone method of distribution, whereby a subscriber is penalized if he lives many miles from the city of publication, the magazines are between the upper and the nether millstones. Few of them have had their income increased in the same proportion as other industries and many a publisher has found his income dwindling as those of his employes have grown larger.

The flower week

Widespread is the interest manifested by florists concerning the proposal for a "Say It With Flowers" week. As has already been pointed out in *HORTICULTURE*, there are endless ways in which such a special week can be made to serve the trade. The point is to get prompt and concerted action all over the country. Perhaps the best way to bring that about is to adopt the suggestion contained in a letter which has been written by Mr. R. C. Kerr, Houston, Texas, to Mr. W. F. Gude of Washington, and a copy of which has been sent to this paper. The letter follows:

Dear Sir:—The campaign which is being inaugurated to establish the "Say It With Flowers" week seems to be gaining popularity. It strikes me that it could not be a more appropriate time to set for the "Say It With Flowers" week, than the week of November 11. We should grasp this opportunity to create a demand for flowers during this great celebration, and there is nothing more appropriate than "Say It With Flowers," and there is certainly nothing more than will come nearer expressing the proper sentiment.

One of the ideas that we might embody, is that everyone wear a flower in memory of the heroes who lost their lives during this great war.

Another idea that we might inject in the campaign, and that is, send flowers to the mothers of those who served, more especially to the mothers of those who lost their lives in the war.

In connection with this campaign, and during the entire week, our window decorations should be played up strong, and our publicity program should be increased for the week.

I am sorry that it will be impossible to attend the F. T. D. Convention in Cleveland. The proper method, as I see it, is to have the President of the F. T. D., and the President of the S. A. F. to declare this the "Say It With Flowers" week. The many retail florists that assembled in Cleveland will no doubt have many suggestions to make along this line.

I think by all means that we should do something now at this convention to create the sentiment to commemorate this great day by "Say It With Flowers."

I trust this matter will come to a head at this meeting, and something can be done.

Yours very truly,

R. C. KERR.

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

Trade Prices on Application

R. & J. FARQUHAR & CO.
BOSTON, MASS.

George Watson's Corner

"You in your small corner and me
in mine."

A certificate of merit was awarded two years ago to a new dahlia, Jean Kerr, by the American Dahlia Society. Since then this high estimate has been fully borne out as any one can verify by visiting the raiser George W. Kerr at Doylestown, Pa. where he holds sway as the Sweet Pea mogul of the Burpee Farms. The Jean Kerr is today considered by experts the finest pure white for commercial cut flower work in the whole dahlia field. Even in a bad dahlia season, when blooms of all other varieties are conspicuous by their absence Jean Kerr never fails to produce her quota of perfect flowers, and those on long stiff stems which with disbudding may average two to three feet in height. Another feature is that unlike other white and light varieties the beetle pest does not bother this one. Better make a note of Jean Kerr.

Caspar Pennock of Lansdowne has the reputation of sending the best double white Killarney that are coming to Philadelphia and a recent visit to his big range of glass confirms this. He certainly does this variety to the queen's taste and they are worth going to see. Another good old timer, Jonkheer Mock, also does fine here and Mr. Pennock is a great believer in it, although some of our growers do not seem to hold it in high esteem. The reason for that is probably the

dollar reason as Jonkheer does not carry well without bruising in out of town shipments and that fact affects monthly returns but it is nothing against this most lovely variety for home consumption. It is a glorified La France and it's a pity it got tangled up with such an uncouth name.

If one wants to see cannas at their best, he can have his heart's desire by taking a day off and going up to Riverton. The Dreer people take a pride in keeping up-to-date on the "World's Best Cannas." The collection covers an area of some twenty acres along the railroad, and is a sight for all beholders from June to late fall. A visit here during the flowering season is especially valuable to a florist who wishes to keep up with the procession. He will quickly learn by comparing one variety with another that one cannot take orders for, say our old standby Florence Vaughan, if there be any of Favorite around, or if he sees Wintzer's Colossal and the President he will quickly realize that Charles Henderson of by-gone fame is now among the has-beens.

Among the bronze leaved cannas about the first to attract attention is the wonderful bronzed leaved trio: Wyoming, with flowers almost yellow; Dr. E. Ackerknecht, the color of whose immense trusses is a clear rosy carmine like the Proserpine tulip and King Humbert—the last probably the most popular of all cannas at the present time. Mr. Michel is particularly pleased this year with some new additions to the bedding sorts. Among these worthy of special mention are: Dazzler, a brilliant orange scarlet; Carmine Beauty, a deep carmine; Cheerfulness, orange; Orange Bedder, bright orange; Eureka, white; The Gem, cream with carmine dots. All these are wonderfully brilliant and peculiarly adapted for bedding,

having the qualities in color and habit which make for the greatest effectiveness.

My personal opinion about bill board advertising which is now agitating the rank and file rather leans to the side of those who think the florists should not go in for that way of saying it. There is a strong civic public feeling all over the country against it and the business of the florist being to beautify nature he should not countenance even by implication anything that defaces nature. As long as the florist can tell his story in equally effective and less objectionable ways he ought to let the bill board idea alone. I do not go so far as some and call it a crime but it is as a rule not in good taste. No doubt I have used this method myself like other seedsmen in the past so I am as guilty as others and own up but years add wisdom sometimes and I do not think I would do it today. Public sentiment is too strong against and it seems to me it would rather drive away business than bring it. And we should never forget that our object in life is to help the public onward to higher things in the advancement of horticulture. We, of all people are the last to set them a bad example.

FLORIST SLEPT TOO SOUNDLY.

Richard Nause, the well known Woodrow road florist, while crossing the bay on the midnight boat Sunday, fell asleep in the smoking room, and during his slumber his pocket was picked of \$250 in bills and checks. He knew nothing of the occurrence until reaching St. George, where he missed his property while walking from the boat to the train. He reported the loss to the police, but he could identify only one person who was near him before he went to sleep, a sailor in uniform.—Tottenville, N. Y. Transcript.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

I recently received a little magazine called Woodlawn Bank Notes which deserves mention because of the new idea which it manifests. This little publication is issued by the Woodlawn Trust and Savings Bank of Chicago, Illinois, and the particular number which I have before me is given over almost entirely to a description of the trees of the Woodlawn section. The well worded introduction reads in part as follows:

"It is not the trees in the parks or on the forest preserves but the ones in front of our windows or in the back yards where children play which become our warmest friends. Perhaps it is only a willow whose top is level with our third floor apartment dining room window, and which in summer time shuts out with its waving branches clothed with leaves like a shimmering curtain all the unsightly back stairs across the alley; perhaps is is a cottonwood or Ailanthus just outside our bedroom window whose rustling in the night breezes soothes us to sleep; but whatever it is, it is the tree nearest to where we live which becomes the silent and most loved friend of our tree world."

On almost every page of the magazine there is a picture showing some street or avenue with its long rows of trees standing like soldiers on guard. There are trees of many sorts, too, including elms, locusts, cottonwoods, oaks and willows. Some of the most interesting trees are also described. On the midway, it seems, there are eight rows of elms, each a mile long, and the writer of the article remarks, "An elm is not really good looking until it is fifty." As these trees are only twenty to thirty years old, the midway will surely be a handsome spectacle thirty years from now.

Apparently the cottonwood or Carolina popular is the most common shade tree in Woodlawn, and probably in all Chicago. There seems to be a special reason why it is of more than usual value there, as its smooth glossy leaves have just enough natural varnish to be kept free from soot, which always abounds in cities where soft coal is burned. They are bright and clean looking when the elms and maples look soiled and weary.

Years ago this section was covered with a virgin forest and a few of the aged oaks still survive. They do not take kindly to civilization, though, and

are gradually dying out. One old oak, however, is a most persistent tree. It was alive when the French explorers and settlers were laying the foundations of the Illinois country. It was a hundred years old when the first permanent settlers founded their town at the mouth of the Chicago River. Now it stands in the midway, a living monument to Illinois' colonial past and all her historic hundred years of statehood.

In this little booklet there is certainly a suggestion for the banks of other cities. A publication of this kind is the best of advertising for a town which seeks to attract home makers. It helps win depositors for the bank and incidentally aids the nurserymen by creating a demand for

trees and shrubs. It leads people to echo the sentiment with which Joyce Kilmer begins his famous poem

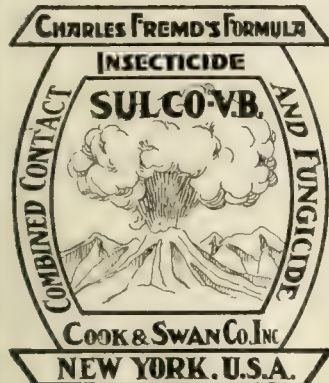
"I think that I shall never see
A poem lovely as a tree."

Not long ago at the Nathaniel Kidder place in East Milton I found another specimen of *Pleroma macranthum* growing in the garden. It was not trained like the one on the Crane place in Ipswich, which I mentioned some weeks ago, but it made a handsome appearance. Mr. W. J. Martin, the gardener, is very fond of it and keeps it growing all winter in the greenhouse as well as in the garden in summer. Of course it is tender, yet it makes a good garden subject. It seems a pity that some of these old favorites should be neglected to the extent that they are. The time was when this *Pleroma* was used quite freely for bedding. It came from Brazil originally and is a strong grower, requiring ample quarters for



Pleroma Macranthum

IN LINE FOR FALL SPRAYING IN NEW ENGLAND



SAN JOSE SCALE
OYSTER SHELL SCALE
BAY TREE AND PALM SCALE
SCURFY BARK LOUSE
PEAR PSYLLA
CLUSTERS OF APHIS EGGS
HANG OVER FUNGUS SPORES OF THE
BROWN ROT OF THE PEACH AND
OTHER STONE FRUITS.
PEACH LEAF CURL
APPLE CANCER AND SCAB

Destroy the above named insects and fungus spores by spraying them with

SULCO-V.B.

A combined contact insecticide and fungicide of known reliability

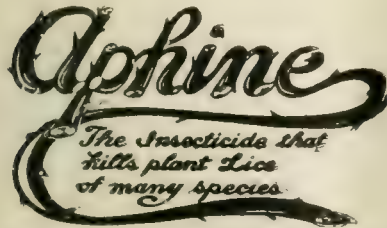
Simple, Sure and Safe — Right in Principle and Price

From your dealer or direct—go to your dealer first

Address **COOK & SWAN CO. Inc.**

148 Front Street
NEW YORK CITY

141 Milk Street
BOSTON, MASS.
Geo. H. Frazier, Mgr.



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.
Quart, \$1.00; Gallon, \$2.50.

FUNGICINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.
Quart, \$1.00; Gallon, \$2.50.

VERMINE

For eel worms, angle worms and other worms working in the soil.
Quart, \$1.00; Gallon, \$2.50.

SOLD BY DEALERS.

Aphine Manufacturing Co.
MADISON, N. J.



Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to direction, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

½ Pint, 30c.; Pint, 50c.; Quart, 90c.;
½ Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00.
Directions on package.

LEMON OIL COMPANY

Dept. S. 420 W. Lexington St., Baltimore, Md.

CAMBRIDGE

NEW YORK



World's Oldest and Largest
Manufacturers of
FLOWER POTS

WHY?

A. H. HEWS & CO., INC.
Cambridge, Mass.

full development. It is good for pillar treatment in the greenhouse and looks well when trained to a cross section end. While the individual flowers do not last long they are produced in great abundance and cover a long period. Most old gardeners know this plant as Pleroma, but it is now listed more commonly perhaps under the name of Lasiandra macranthum.

Our friends across the water are so far ahead of us in rose culture and so well aware of the fact, that we feel grateful when they pay us a compliment. However, in one of the London trade papers I find the following letter:

Dear Sirs: Re your notes upon this rose as shown at R. H. S. Meeting. It is a fine thing. No Rambler will last so long when cut as Kew Rambler. I have had it last good for eight days and its lovely pinkish-white flowers are so cheerful in their coloring. It is said to be a cross between R. Souleana and Hiawatha. The growth is much like R Souleana. Any one seeing it growing could not refrain from giving it an award. This fact is another argument for a Rose Test Garden. We are far behind our American friends in this, as in many other horticultural details. Why not approach the Kew authorities to set up such a trial ground. One of their walled-in private gardens would be just the thing.

WALTER EASLEA.

Eastwood, Leigh-on-Sea.

Will the editor of the Rose Annual, Mr. J. Horace MacFarland, please take notice.

THE BURRAGE ORCHIDS.

Mr. Albert C. Burrage has decided to open his famous orchid greenhouses to the public for several Saturdays and Sundays during October at the Beverly Farms, Mass. estate. He is an ardent enthusiast regarding orchids, and next to his immediate family these wonderful blooms make his greatest interest.

THE National Nurseryman

The oldest and best established journal for nurserymen. Circulation among the trade only. Published monthly. Subscription price \$1.50 per year. Foreign subscriptions, \$2.00 per year. In advance. Sample copy free upon application from those in the trade enclosing their business card.

National Nurseryman Pub. Co., Inc.
HATBORO, PA.

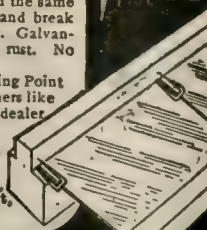
Dreer's Peerless Glazing Points For Greenhouses

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HENRY A. DREER,
714 Chestnut Street,
Philadelphia.

FULL
SIZE
No 2



THE GARDENER'S SECTION

CHANGES AMONG GARDENERS.

Henry Lawrence has resigned his position as gardener at the Hendee place in Hartford, Conn. and taken a position with the United States government. He is at present located in Virginia.

Gustave Beekman has become gardener to Mrs. L. A. Hermann, Long Beach, N. Y.

Robert Crighton, who has returned from service in the army, has become head gardener on the Charles Bradley estate, Convent, N. J.

MILLERS AND POTATOES.

A report has come from Redlands, California, of swarms of white millers flying from potatoes which had been harvested there in a cellar. The potatoes from which these millers came were rotting badly. Has anyone experienced a similar trouble or can they explain it?

At the Grange Fair in Weston we exhibited the Hillcrest potato a seedling from some potato balls which were found on the farm in 1918. This potato is characterized by a thin smooth skin, few and shallow eyes and a good light color. It is about three inches long and has stood well through this season's rot.

Another seedling which we are watching with great interest on the farm is a climbing rose. It was first seen in our chrysanthemum bed where no roses had been planted but near the cedar fence on the post of which many fine roses such as the Evangeline American Beauty and Silver Moon were growing. The foliage of this seedling is of the distinct rose type, smooth, well veined, deeply serrated, and usually having three divisions instead of five to a leaf. It is a vigorous grower having sent out several shoots from its root. It has not yet blossomed but keeps us in pleasant anticipation of its doing so next summer when we may be proud of our Hillcrest rose as well as of our Hillcrest potato. At the Grange Fair in Weston we were the proud recipients of seventeen ribbons, fourteen blue and three red. The blue included one for the best display made at the fair and one for out of door roses. The fair was held on the second of October.

M. R. CASE,

Hillcrest Farm, Weston,

October 4, 1919.

THE HORTICULTURAL SOCIETY OF NEW YORK.

Monthly Meeting

The third Wednesday in each month has been decided upon as the state meeting time of this society. The first meeting under this arrangement will take place on Wednesday, October 15, 8 p. m., at the American Museum of Natural History, 77th street and Columbus avenue, N. Y. City.

A primary motive in establishing this regular meeting date is to provide for the gardening profession in New York and vicinity a stated monthly meeting to which gardeners may come to discuss current happenings, and also to exhibit new, unusual, or interesting plants and flowers. An invitation is extended to all, especially gardeners, whether members of the society or not, to attend these meetings. The larger the attendance at the first meeting the better we can plan for the future, so all interested are urged to be present.

For the benefit of those unfamiliar with the transportation facilities of the city, the following statement is made: the American Museum of Natural History may be reached by the 6th or 9th avenue Elevated to 81st street by the 7th avenue and Broadway Subway to 72nd street or 79th street, the former being an express station; and by the 8th avenue and Columbus avenue surface cars.

GEORGE V. NASH,
Secretary.

MAX SCHLING AND ARTEMISIA LACTIFLORA.

Gentlemen:—Regarding *Artemisia Lactiflora* on page 273 of your issue of September 27th, five years ago I found *Artemisia Lactiflora* in a little private place and purchased a small clump. I grew *Artemisia Lactiflora* in Europe and was very glad to see an old acquaintance. From that one plant I propagated sufficient so that I was able to cut this summer blooms from 200 sturdy plants.

It might be of interest to you to know that this was introduced in central Europe by way of Russia and I knew the plant when I was practically a boy only. Thanking you,

Yours very truly,

MAX SCHLING.

FERNS FOR SPECIAL PLACES

Edward Gillett of Southwick, Mass., in his little booklet on hardy native ferns has the following to say about ferns for special places:

Ferns for Dry Places.

One of the hardest problems which confronts nearly every amateur gardener is the beautifying of dry, shady locations. There are few flowering plants which can be introduced under such conditions and give the desired results. There are a few varieties of ferns, however, which can be planted under such conditions and which as a rule give results entirely satisfactory. Four of the best varieties for planting in dry, shady locations are the *Aspidium acrostichoides*, (Christmas fern), *Aspidium marginale*, (Evergreen Wood fern), *Dicksonia punctilobula*, (hay-scented fern) and the *Osmunda Claytoniana*. The *Osmunda Claytoniana* grows to a height of two to three feet and should be planted in the background. The *Dicksonia punctilobula* and *Aspidium marginale* grow about eighteen inches high and the *Aspidium acrostichoides* from twelve to fifteen inches. These four varieties make a fine group. The *Aspidium marginale* and *acrostichoides* being evergreen retain their fronds during the entire season. In planting ferns in a dry location the soil should be prepared with special care. It should be made very fine by spading and a liberal amount of well-rotted horse manure should be added. This furnishes fertilizer and also makes the ground more porous which tends to draw the moisture from below. Frequent watering is essential, until the ferns have sent out new root growth.

Ferns Which Like Sunlight.

There are several varieties of ferns which can be grown in the open sun. This number depends to a great extent on the moisture condition. There are very few that can be planted in the

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open sun where the ground is extremely dry. The *Aspidium thelypteris* (marsh shield fern) if planted in the open sun should be given a moist location. This fern is light green in color and should be planted in masses in order to produce much of an effect. It grows to a height of from twelve to eighteen inches according to the soil and moisture conditions. For a large, rank growing variety the *Onoclea struthiopteris* (Ostrich fern) is one of the very best. This will grow in the open sun in ordinary garden soil where there is an ordinary amount of moisture present. This fern should be planted in colonies, the individual roots being planted once in eight or nine inches. The fronds are so long that wind storms are apt to break them unless they are planted close enough to protect one another.

This variety is also especially desirable for planting in shady places where the ground is a little low and where a tall, massed effect is desired. The *Dicksonia punctilobula* will also grow in the open sun. This fern, for massed effects, is the very best for sunny locations. It spreads quite rapidly from underground root stalks and if it is planted rather thick will, in a few years, form a dense mass. While this fern thrives very well in dry places it will make larger growth if planted where there is an average amount of moisture present. The *Aspidium acrostichoides* grows in the open sun where there is a good moisture condition. However, this, as well as any other evergreen fern, loses somewhat the beauty of its foliage when exposed to the direct rays of the sun.

The Useful Bladder Fern.

The *Cystopteris bulbifera* (bladder fern) is a sort that should be used much more than it is at the present time since it can be planted under a wide range of conditions and for a number of purposes. This variety grows beautifully in the open sun in moist places. It is especially effective when planted in masses on moist banks, along the edges of shaded walks or along the edge of a small stream where a low, light green carpet effect is desired. The general habit of this fern is to creep yet the new fronds stand upright. When grown under favorable conditions the fronds attain a length of nearly three feet, the ends of the fronds dropping to the ground. It is extremely graceful in its habit; the color being light green forms extremely pleasing carpet effects when planted in masses. This fern develops fine plants when planted as specimens in rockeries.

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Cleveland, O.—J. M. Gasser Co., Euclid Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th St.

Cleveland, O.—The Smith & Fettes Co.,
735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643 Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

East Orange, N. J.—Smith, The Florist.

Fall River, Mass.—Warburton, 495 New
Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017 Grand Ave.

New York—David Clarke's Sons, 2139-
2141 Broadway.

New York—A. T. Bunyard, 413 Madison
Ave., at 48th St.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
son Co.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—Randall's Flower Shop,
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NATIONAL PUBLICITY CAMPAIGN.

In his address before the Society's Convention in Detroit last August, Major P. F. O'Keefe, who takes more than a mere business interest in our Publicity Campaign, said:

"Flowers come under the head of articles requiring comparatively small outlay. We must therefore keep our advertising going. To popularize anything requires persistent and insistent reiteration—not repetition of the same thought expressed in different ways, but nationalizing a thought by continuous advertising. We are popularizing very rapidly indeed our slogan "Say it with Flowers." It is fast becoming one of our national sayings, a national institution, and is to-day, without question, an asset which you gentlemen possess that is worth hundreds of thousands of dollars. It is an asset which, unlike any other that I can think of, has the practical ability of being divisible among a lot of business men scattered over our entire country. The example which it sets is one that, once cultivated, grows from one person to another in each community, and from one community to another. Those who read see it from the pages of their favorite magazine; those who travel see that not only has this slogan been acted upon in their community but in the other communities they pass through, and it is not the business-pulling vehicle of one man but of thousands."

As the Major said, we must keep our advertising going. As long as we keep it going our industry will be advanced and all of us will profit. To turn back would be little short of a calamity. We have succeeded in the attainment of our object—a greater use of flowers—beyond our expectations at the outset. Our slogan is working as we believed it would, and our Committees, as well as everyone else really interested in the Campaign, are satisfied with the progress made and the results forthcoming.

Our enthusiasts are now concerned with the important question of keeping our advertising going. It costs money to do this—big money. The \$20,000 appropriated for our Fall advertising has been judiciously placed. We ought to have had \$50,000 to expend, and really expected to have had it. All of us would experience results in proportion to the expenditure. With the small amount of money available we have achieved a wonderful success,

**When Writing to Advertisers Kindly
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At your service to deliver Flowers
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Everything in Flowers
Broad Street at Cumberland

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B. E. GILLIS, President.
E. P. NEIMAN, Secretary.
Member Florists' Telegraph Delivery
DENVER, COLORADO

but we have not been able to cover
this great country of families as we
might. We are only "marking time,"
when we see a clear field ahead for a
victorious advance.

We have several good business
months before us, months bringing
special flower selling seasons calling
for united efforts in this publicity
movement. If the many thousands
who have not yet subscribed to our
Campaign Fund would awaken to the
importance of individually assisting
us to attain our objects in full the re-
sulting benefit would be theirs in com-
mon with their brethren in the trade.
There is hardly a florist in the coun-
try who cannot afford to contribute—
we should like to say hardly one who
does not intend to subscribe. A sub-
scription is not a donation by any
means—it is a small investment calcu-
lated to produce rich returns.

Our Committees meet in Buffalo on
October 14th and 15th, and will then
take up the matter of our publicity for
the Winter and Spring months, a mat-
ter governed very materially by the
question of how much money is likely
to be available to promote the public-
ity. You, Mr. Non-subscriber, can
render welcome assistance by sending
in your subscription, or notifying the
Secretary as to the amount you are
willing to subscribe at a time to suit
your own convenience.

JOHN YOUNG, Secy.

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1,313,310. Weed-Destroyer. Henry
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1,313,427. Manure-Spreader. Henry
Synck, Coldwater, Ohio, assignor to
New Idea Spreader Co., Coldwater,
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1,315,286. Plow Lift for Tractors. Al-
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5523 Euclid Ave.
Will take good care of your orders
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Deliver orders from any part of the country to
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JOHN H. DUNLOP
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NEWS AND COMMENT

PHILADELPHIA.

Business compared to a year ago, of course, is not quite as good, but taking it all in all we are having very excellent business, particularly for good quality flowers.

There is too much outdoor quality coming in; particularly is this so of Dahlias, Cosmos, Candytuft, and flowers of that nature.

Roses are coming in a little more plentiful than they were the week previous, especially with Columbias, Russells and Roses of that character. Beauties are selling well, quality good. In fact, most of the Roses are very good in quality. Ophelia, White Killarney, Hadley, Sunburst and Ward are selling very well indeed.

There is a limited supply of Valley, which is bringing 15 and 20c.

Orchids are getting a little more plentiful—very little outside of Cattleyas to offer, but they are exceptionally good and selling well.

Chrysanthemums are coming in, a few pink, but mostly yellow and white—Golden Glow in yellow, and Smith's Advance in white. Unaka is the only pink so far, and only a limited quantity. Not enough Chrysanthemums so far to go around.

A little Bouvardia coming in and a few other odd flowers like it.

The supply of Carnations is short for the demand, quality very good, getting longer stems.

E. H. WILSON HEADS HORTICULTURAL CLUB.

Ernest H. Wilson was elected president of the Horticultural Club of Boston at the annual meeting last week at the Parker House. He succeeds John K. M. L. Farquhar, who has been president for eight years and declined reelection. Other officers elected were the following named: P. Welch and F. R. Pierson, vice-presidents; Fred Wilson, secretary, and E. Allan Peirce, treasurer. The guests were W. A. Manda of South Orange, N. J., and E. Strout of Biddeford, Me.

CHRYSANTHEMUM SOCIETY OF AMERICA.

The annual business meeting of the Chrysanthemum Society of America will be held at the Engineering Building, New York, on Nov. 5, at 8 p. m.

Additional special prizes have been offered for the annual exhibition to be held in conjunction with the American Institute of the City of New York at the Engineering Building 25-33 West 39th Street, New York, November 5 to 7, as follows:

Class O.

President's Cup—For the best 10 blooms, Crimson Chrysanthemum, one variety on long stems. Open to all. Silver Cup offered by Wm. W. Vert, President C. S. A.

Class P.

Hitchings Silver Cup—For the best 10 blooms, Yellow Chrysanthemum, one variety on long stems. Open to all. Offered by Hitchings & Co., Elizabeth, New Jersey.

The complete list of prizes may be had on application to W. A. Eagleson, Secretary Board of Managers, The American Institute 324 West 23d Street, New York.

CHAS. W. JOHNSON, Sec.

"MUM" EXHIBITORS WANTED.

Denver, Colo., Oct. 2.

Gentlemen:—

I wish you would urge the florists of the country who are interested in "Mum" exhibitions to enter for the prizes offered by the Denver Society of Ornamental Horticulture. We are offering a \$50 first cash prize and \$25 second cash prize, for the best 25 flowers of new chrysanthemum novelties since 1917, five or more varieties. We would like exhibitors to declare their intentions to exhibit as soon as possible. No entrance fee required, open to the whole country. Exhibits should be addressed to the Secretary, S. R. DeBoer (charges prepaid), 203 Tramway Bldg., Denver, Colo. Colorado and the west is anxious to see the varieties of recent introduction.

ADAM KOHANKIE,

Supt. Washington Park,
Manager.

PROF. LUMSDEN BACK.

Professor D. Lumsden, of Cornell University, who has for the past summer acted as director of the agricultural reconstruction and landscape work at the Walter Reed General Hospital, Takoma Park, D. C., is now back to his duties at the Department of Floriculture, College of Agriculture, Cornell University.

NEW ENGLAND.

Bailey Ganung, of Bethel, Conn., has sold his extensive property in that district, which consists of 112 acres of land and numerous buildings, to A. N. Stanley, of Lime Rock, a landscape gardener. Mr. Stanley has already taken possession of the property and intends to cultivate flowers for the New York market.

Police have been searching for a bold daylight robber who entered the home of Mrs. Rene Pilault, wife of the superintendent of the Halifax, Mass., Garden Company, yesterday afternoon, and after binding and gagging her, made good his escape with nearly \$200 in cash.

H. F. A. Lange, of Worcester, Mass., is now raising a large part of the stock which is sold in the large and handsome store. The concern has about 150,000 feet of glass and reports an excellent season's business. Randall, the florist, of Worcester, says that business is ahead of that of last year. Being a progressive florist he is doing considerable local advertising and finds that it pays.

Herman J. Snyder, of Worcester, has a nice lot of stevia coming along. He also has some excellent violets and about 15,000 bedding plants.

W. J. Wood, of Worcester, has been cutting a big crop of asters this fall. He is devoting considerable attention indoors to primroses and sweet peas.

The Quarry Floral Co. of Worcester, is putting up three new houses in a central location and expects to do a

MASTER BRAND CONCENTRATED MANURE!

Greenhouse and Garden Fertilizers. Write us for detailed information and prices on

**High Grade Concentrated
Sheep Manure**

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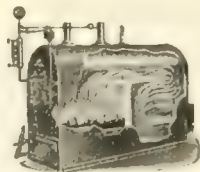
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



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Kroeschell Bros. Co., 466 W. Erie St.
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When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

DREER'S "Riverton Special" Plant Tubs



No.	Diam.	Ea.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER, Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.

CYPRESS GREENHOUSE STOCK

PECKY CYPRESS STOCK HOT BED SASH

Ask for Circular D and Prices

THE A. T. STEARNS LUMBER COMPANY
NEPONSET, BOSTON

largely increased business. Much of the material was furnished by the Stearns Lumber Co., of Boston, and the quick delivery made has elicited much favorable comment. The material was hauled by truck. A Kroeschell boiler is being installed and the rest of the equipment will be in keeping.

Aiken, the Florist, of Springfield, is growing a large amount of material for his own use. He has 90,000 square feet of glass, including a 400 foot house of roses. His stock includes some excellent carnations and "mums."

Osterman & Steele, of Springfield, have been having some very pretty window displays of late.

BOSTON.

The Waban Rose Co. is sending in some of the finest Russells ever seen in the local market. It is seldom that buyers are so enthusiastic over any, offering as they have been the past week over these Russells.

The Waban Rose Co. has made an arrangement with the Shepard stores for the exclusive sale at retail of their seven varieties of selected roses, Russell, Hadley, Ophelia, Premier, Thayer, Killarney, Brilliant and White Killarney. The prices are given as follows: 9-inch stem, \$2.00 per dozen; 12-inch stem, \$3.00 per dozen; 15-inch stem, \$4.00 per dozen; 18-inch stem, \$5.00 per dozen.

COMING EXHIBITIONS.

New York City.—The American Institute and Chrysanthemum Society of America, exhibition of 'Mums in the Engineering Bldg., 25-33 West 39th street, Nov. 5 to 7. William A. Eagelson, 322-24 West 23rd street, Sec'y.

Toronto, Ont., Can.—Ontario Hort. Ass'n. exhibition of flowers, fruit, vegetables, etc., Nov. 11 to 15 incl.

When writing to Advertisers kindly mention Horticulture

WHOLESALE FLOWER MARKETS—TRADE PRICES—Per 100 TO DEALERS ONLY

	BOSTON Oct. 9	NEW YORK Oct. 9	PHILA. Oct. 9	CHICAGO Oct. 9
Roses				
Am. Beauty	8.00 to 40.00	8.00 to 40.00	8.00 to 50.00	8.00 to 50.00
Hadley	6.00 to 20.00	4.00 to 20.00	..... to .....	..... to
Hoosier Beauty	6.00 to 20.00	..... to .....	..... to .....	..... to
Killarney	..... to	1.00 to 5.00	..... to .....	..... to
White Killarney	6.00 to 20.00	..... to	4.00 to 8.00	4.00 to 8.00
Mrs. Aaron Ward	6.00 to 12.00	4.00 to 8.00	..... to .....	..... to
Mrs. Chas. Russell	8.00 to 20.00	6.00 to 20.00	4.00 to 25.00	4.00 to 25.00
Mr. Geo. Shawyer	6.00 to 16.00	2.00 to 12.00	..... to .....	..... to
Columbia	6.00 to 20.00	4.00 to 12.00	4.00 to 20.00	4.00 to 20.00
Maryland	6.00 to 12.00	2.00 to 12.00	4.00 to 8.00	4.00 to 8.00
Ophelia	6.00 to 16.00	4.00 to 12.00	4.00 to 15.00	4.00 to 15.00
Cecile Brunner	..... to 2.00	..... to .....	..... to .....	..... to
Adiantum	..... to .....	..... to .....	..... to .....	..... to
Asparagus plum (100 bchs)	..... to 1.50	..... to .....	..... to .....	..... to
apren	..... to .50	..... to .....	..... to .....	..... to
Asters	1.00 to 2.00	1.00 to 2.00	.50 to 5.00	.50 to 5.00
Calendulas	2.00 to 3.00	..... to .....	..... to .....	..... to
Carnations	4.00 to 5.00	4.00 to 5.00	4.00 to 8.00	4.00 to 8.00
Chrysanthemums	3.00 to 4.00	1.00 to 4.00	25.00 to 30.00	25.00 to 30.00
Ferns, Hardy	1.00 to 2.00	..... to .....	..... to .....	..... to
Galax leaves	..... to 2.00	..... to .....	..... to .....	..... to
Gladioli	6.00 to 8.00	4.00 to 8.00	4.00 to 5.00	4.00 to 5.00
Lillies Rubrum	..... to 8.00	..... to .....	..... to .....	..... to
Orchids Cattleyas	..... to 1.00	40 to 1.50	1.00 to 1.25	1.00 to 1.25
Orchids Cypripediums to 1.00 to to to
Smilax to to to to
Sweet Peas	1.00 to 3.00	1.00 to 3.00	1.00 to 3.00	1.00 to 3.00

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Free from Bubbles
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Greenhouse White (Semi-Paste) The
Paint Particular
Florists Prefer

It will pay you to get our estimates.

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Glazing

USE IT NOW

F. O. PIERCE CO.

12 W. BROADWAY
NEW YORK

Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Lasts longer than putty. Easy to apply.

USE WIZARD BRAND

CONCENTRATED PULVERIZED MANURE

Pulverized or Shredded
Cattle Manure

Pulverized

Sheep Manure

The Florists' Standard of uniform high quality for over ten years. Specify **WIZARD BRAND** in your Supply House Order, or write us direct for prices and freight rates

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34 Union Stock Yard, Chicago

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Does Kill Them. Ask for Prices.
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151 H Washington St., Flushing, N. Y.

ASPARAGUS PLUMOSUS

Asparagus plumosus seedling: \$1.00 per 100; \$6.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

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C. KEUR & SONS, HILLEGOM, Holland.
Bulbs of all descriptions. Write for prices.
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CANNAS

For the best Up-to-Date Cannas, get new price list. THE CONARD & JONES CO., West Grove, Pa.

CARNATION STAPLES

Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c.; 3000 for \$1.00 post-paid. I. L. PILLSBURY, Galesburg, Ill.

DAHLIAS

Peony Dahlias Mrs. Frederick Grinnell.
\$10.00 per clump. Cash with order.
JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker, Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

DAISIES

Daisies, Bellis, Monstrosa, pink or white, also Long Fellow and Snowball, fine strong plants, \$3.00 per 1,000, \$8.25 for 3,000. CASH. BRILL CELERY GARDENS, Kalamazoo, Mich.

FERNS

Boston ferns out of the bench ready for 6 in. and 8 in. pots. Come and see the stock and for prices.
J. H. FIESSER, North Bergen, N. J.

GARDENIA VEITCHI

Gardenia Veitchi, 6 inch, pot grown.
\$7.50 a dozen, \$50.00 per 100.
BOBBINK & ATKINS, Rutherford, N. J.

GOLD FISH

Gold fish, aquarium plants, snails, castles, globes, aquarium, fish goods, nets, etc., wholesale. FRANKLIN BARRETT, Breeder, 4815 D. St., Olney, Philadelphia, Pa. Large breeding pairs for sale. Send for price list.

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A Standardized, Complete and Inexpensive Line. Ask for Prices.
PERFECTION CHEMICAL CO., INC.
151 H Washington St., Flushing, N. Y.

KENTIAS

Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2 1/4-inch pots at \$15 per 100—larger quantities on application. J. H. FIESSER, 711-741 Hamilton Ave., North Bergen, N. J.

ORCHIDS

HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laello-Cattleyas our specialty. One trial order solicited.

PANSY PLANTS

Pansy Plants, strong and stocky, "Superb Strain, \$4.00 per 1,000, 3,000 for \$11.25, 5,000 for \$17.50, cash. These plants and strain will please you. BRILL CELERY GARDENS, Kalamazoo, Mich.

PEONIES

Peonies. The world's greatest collection, 1200 sorts. Send for list. C. BETSCHER, Canal Dover, O.

POINSETTIAS

Poinsettias, 3 inch, \$15.00 per 100. 2 1/4 inch, \$12.00 per 100; \$100.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

PRIMULA OBCONICAS

Rosea Apple Blossom Kermesina
Good strong stock from 2 1/4 in. pots
\$6.00 per 100, \$55.00 per 1000.
J. H. FIESSER, North Bergen, N. J.

SPHAGNUM MOSS

Live Sphagnum Moss, orchid peat and orchid baskets always on hand. LAGER & HURRELL, Summit, N. J.

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Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. J. H. TROY, Mount Hissarlik Nursery, New Rochelle, N. Y.

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Inexpensive. Efficient.
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Have you ever given careful consideration to the cost of your fall repair work? If not, now is the time to make preparations for reducing this cost. Our line of Greenhouse Fittings will be found just the thing for practically all of the work which you intend to do. Write for descriptive catalog on Sash Operating Device and Greenhouse Fittings. It will repay you many times. Write today.

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NOT TOO EARLY TO Buy Christmas Stock Now

Get your stock before the other fellow picks all the best. Finish the plants in your own houses and save disappointment later on from express delays, damaged plants and unfilled orders.

Stock listed below is all of best quality. Grown by experts and packed carefully

Extra heavy ADIANTUM HYBRIDUM, 4-in., \$75.00 per 100

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3 in., \$12.00 per 100.

CALENDULA Orange King, the O. K. strain. The result from a number of years of greenhouse selecting. If you want the best let us supply you. \$5.00 per 100, \$45.00 per 1000.

BIRD'S NEST FERNS. Excellent stock, 2½-in., \$18.00 per 100; 3-in., \$27.50 per 100.

BUDDLEIA officinalis and Parqubarii, at \$20.00 per 100, heavy clumps.

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Nephrolepis, Verona, Dwarf Boston, Scottii, Elegantissima, Teddy Jr., Roosevelt

POT-GROWN 100
2½ in. \$12.50
4-in. 50.00

BENCH BOSTONS

Ready for 4 in. pots, \$50.00 per 100.

PTERIS Wimsettii and Victoria, 3-in., \$16.00 per 100.

PTERIS Rivertoniana, 3 in., \$20.00 per 100.

The above are especially fine - ready for 4-in. pots.

FERNS for fern dishes. As- 100 1000
sortment of best sorts.

2½-in. \$6.00 \$55.00
3-in. 12.00

KENTIA Belmoreana, Strong Doz. 100

2½-in. \$1.50 \$12.00

3 in., \$25.00 per 100. 4-in., 50c. each

IVY, English. 3-in., \$8.00 per 100.

Dracaena Indivisa

Pot-grown. NOT field-grown. Strong, 3-in. at \$13.00 per 100, \$125.00 per 1000.

PRIMROSES, Obconica Grandiflora and Gigantea, mixed, 2½-in., \$7.00 per 100; \$65.00 per 1000; 3-in., \$12.00 per 100.

Malacoides Rosea, selected strain, 2½-in., \$5.00 per 100; \$45.00 per 1000; less than 100 at \$6.00 per 100. Chinese, at \$6.00 per 100, \$55.00 per 1000.

CIBOTIUM, 4 inch. Ready now. \$9.00 per doz., \$70.00 per 100; 3-in., \$6.00 per doz., \$45.00 per 100.

Godfrey Callas

From 3-in. to 3½ in. pots, to move at once. \$8.00 per 100.

A Hit at the Detroit Convention NEW FERN

Nephrolepis Macawii

(Wavy leafed sport of Scottii.)

Expert Fern growers call it the fastest growing fern on the market.

We offer for immediate delivery, strong 2½-in. plants, \$20.00 per 100, \$200.00 per 1000.



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Blood Red, Salmon, Crimson, White, carmine eye. 4 in., 50c.; 5 in., extra fine, \$1.35.

BEGONIA

MELIOR and CINCINNATI

Very fine, 5 in. at \$1.35; 3½ in., ready for 5 in. at 70c. Can ship at once; nice 2½ in. at \$27.50 per 100

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Well shaped 5 in. plants, \$1 each

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\$100 per 1000

HELIOTROPE PLANTS

A good offer for Xmas. Heavy plants from 5 in pots, 50c.

Boston Yellow Marguerite

True Stock. 2½-in., \$7.00 per 100, \$65.00 per 1000.

OTAHEITE ORANGES, for growing on, 2½ in., \$20.00 per 100

LATANIA Borbonica, Fan Leaf Palm, 3-in., \$30.00 per 100.

ARECA Lutescens, 2½-in., single plants, \$15.00 per 100; 2½-in., made up three plants to the pot, \$20.00 per 100.

ASPARAGUS Plumosus, seed- 100 1000

lings \$8.00 45.00

2½-in. \$5.00 45.00

3 in. 10.00

Sprengeri Seedlings 7.00

Sprengeri, 2½-in. 5.00 45.00

3 in. 10.00

CHRISTMAS JOY PEPPER. Heavy,

½ in. pots, \$22.50 per 100.

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Massachusetts greenhouse grown, 1000 \$3.00; 5000 \$13.50.

SIM'S GOLD MEDAL PANSY SEED

No better strain was ever offered. ¼ oz. \$4.00, ½ oz. \$7.50, 1 oz. \$15.00.

FREESIA PURITY. (Fischer's Improved.) ½-in. to ¾-in., \$10.00 per 1000

WHITE CALLA. Ethiopica, 1½-in. to 2-in., \$17.50 per 100.

We offer for immediate delivery

FARDEL'S FREESIAS

MIXED COLORS

Packed in cloth bags containing 1000 each. \$40.00 per 1000.

Without doubt the choicest selection of Freesias offered the Trade today.

Coleus Trailing Queen

Fine for mixed pan, basket and hamper work. 2½-in., \$6.50 per 100, \$60.00 per 1000.

Crotons

Nice 2½-in. plants. Get your stock now and be ready for your mixed pans and hampers for the holidays. A good assortment of highly colored sorts both broad and narrow leaf types. \$35.00 per 100

Dracaenas

Godsefiana, Sanderiana, Lord Wolseley, Kelleriana and Terminalis. They are highly colored and just right for mixed pans and hampers for the holidays. You will save money by getting them now. Strong, 2½-in. pot plants, \$25.00 per 100; 3 in., select stock, \$40.00 per 100.

We can still take orders for

Giganteum Lilies

6-8 and 7-9 cm sizes
If you want best quality bulbs give us a trial order.

Cash or satisfactory trade references. No C. O. D. Shipments.

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HORTICULTURE

Vol. XXX

OCTOBER 18, 1919

No. 16

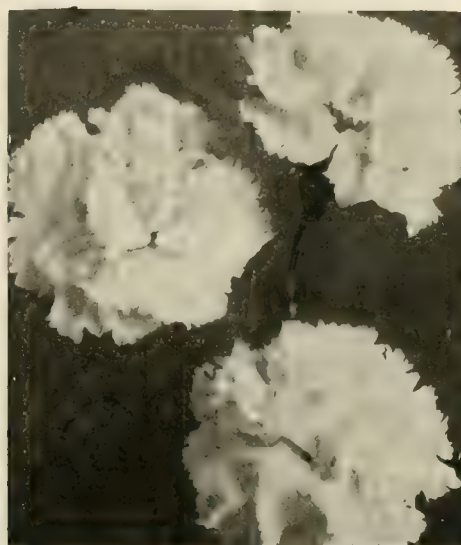
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PILGRIM CRUSADER
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MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
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Unusually choice quality for so early in the season, good flowers and good stems — Matchless, Ward, Laddie, Washburn, Beacon, Etc.

Per 100
Special \$4.00
Fancy 3.00

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Yellows, Pinks, and Whites, \$2.00 to \$6.00 per Dozen.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.
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THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we **RECOMMEND IT MOST HIGHLY.**"

Strong plants, 2½-inch pots, \$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots, 7.50 per dozen, 50.00 per 100
Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:	Each
Elegantissima, elegantissima compacta, and Muscosa, 2½-inch	\$0.35
Elegantissima and elegantissima compacta, 6-inch	.75
Muscosa, 5-inch	.75
Elegantissima and elegantissima compacta, 8-inch	2.00
Elegantissima and elegantissima compacta, 10-inch	4.00
Harrisii, 8-inch	3.00
Dwarf, Boston, 8-inch	2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown, N. Y.

FERNS

Boston and Scottii, pot grown, shipped without pots.

4-inch \$3.00 per dozen — \$20.00 per 100

5-inch \$4.80 per dozen — \$35.00 per 100

Alyssum Giant Double, *Heliotrope*, *Lantanas*, *English Ivy*, *Swainsona*, *Moonvines*, *Lobelia*, *Crystal Palace Gem*, *Coleus*, standard sorts. For immediate shipment from 2-inch pots **\$2.50 per 100, \$22.50 per 1,000.**

Hardy English Ivy, *Double Giant Alyssum*, strong plants from 3-inch pots, **\$3.50 per 100.**

Coleus Brilliancy or Christman Gem, 2-inch, **\$3.00 per 100.**

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R. Vincent, Jr., & Sons Co.

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Henry H. Barrows

FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTTY

CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood

Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

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ELMER D. SMITH & CO.
ADRIAN, MICH.

Snow Queen Canna
Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.
The CONARD & WEST GROVE JONES CO. PENN., U.S.A.
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Simple method of correct accounting especially adapted for florists' use.
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HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 415, DUNDEE, ILL.

E. W. FENGAR

CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

Flowers Under Glass

Primulas for Christmas should be fed now in weak doses once a week. Cow manure and a little soot will give them the dark green foliage one loves to see. Place them on a light, airy bench well up to the glass, go over them often and give a little more space as required. An even temperature of from 48 to 50 degrees at night should be given. The frequency that they will require water can only be determined by going over them three or four times a day. Every florist will be very busy getting his different crops ready for the holidays, and one of these is primulas. Pot up the small stock now and let it grow on for the mid-winter and spring sales. A rich compost of cow manure, leaf mold and fibrous loam should be used.

The best carnation plants are those which have eight or ten stocky shoots about six inches long. Remove at once all short shoots with buds at the end. This will give the other shoots at the base a chance to send up long flowering stems. Carnations planted in a few inches of soil indoors can stand more cold than heat, and 48 to 50 degrees at night is better than 55, while they are getting established. Don't worry if the plants are slow to send up flowering shoots, as long as they have plenty of strong shoots coming from the bottom and are full of good foliage. Once every ten days they should have light fumigations.

The chrysanthemum house should be emptied, cleaned and replanted as soon as possible. Among the desirable things which might follow the chrysanthemums are sweet peas, snapdragons, stocks, marguerites, violets, mignonette and pansies. For these crops the soil will not need to be removed, but should be well dug over and some bone meal added.

Shamrock for the St. Patrick Day trade should be sown now. Every year there is more call for shamrock. Prepare some flats and sow the seed thinly. The seedlings should be potted in small pots when large enough and grown in a cool house. About 45 degrees at night will be right.

Allamandas for early flowering should now be kept drier at the roots in order to harden and ripen up their

JUST RECEIVED HOLLAND BULBS FREESIA PURITY

¾ INCH UP

Prices on Application

J. M. THORBURN & CO.

53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON

SPECIALIZE IN SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

DUTCH BULBS PAPER WHITES JAPANESE LILIES

Write for prices

AMERICAN BULB CO.

172 N. Wabash Ave., Chicago, Ill.

Burpee's Seeds

PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds.

Improved styles in Implements

Catalogue upon application.

16 So. Market Street
BOSTON, MASS.

DREER'S

FLORIST SPECIALTIES
New Brand New Style
RIVERTON HOSE

Furnished lengths up to 500 ft. without seam or joint.

The HOSE for the FLORIST

¾-inch, per ft., 19 c.

Reel of 500 ft. " 18½ c.

3 Reels, 1000 ft. " 18 c.

¾-inch, " 16 c.

Reels, 500 ft., " 15½ c.

Couplings furnished without charge

HENRY A. DREER

714-716 Chestnut St.,
PHILADELPHIA, PA.



wood. They will rest well in a temperature of 50 to 55 degrees, but should be kept at 65 when starting into bloom. Give plenty of water as soon as they get into active growth. Allamandas may be so managed that they will bloom at any time of the year by first resting the plants and then pruning them back and encouraging root action. Where yellow flowers are wanted these plants are excellent, and they are well adapted to various forms of decorations. Plants will have made fine stock by this time if they were pruned last spring to within a joint or two and these when they had made two or three whorls of leaves pinched again, and so on during the summer.

A well assorted mixture of tulips is often used for outdoor planting and looks well, but beds of one solid color make a more pleasing as well as a more imposing show. Take care to select varieties of uniform height which bloom together. The finest of all white bedding tulips is White Joost van Vondel. Flamingo and Rose Grisdelin, pink; Yellow Prince and Ophir d'Or, yellow; Belle Alliance, scarlet; and striped Joost von Vondel, rose flaked white, are of uniform height and bloom together. Gesneriana lutea, Golden Crown, T. retroflexa, Bouton d'Or and Leghorn Bonnet are among the inexpensive late tulips. Among whites La Candeur is good; in scarlets, Gesneriana spathulata and Inglescombe Scarlet; in pink, Inglescombe.

Bouvardia should now be making lots of roots in the new soil if they were lifted and planted out in a bench during the latter part of August. The temperature should not be too low, 60 degrees at night, 70 to 75 on bright days and 65 on cloudy days will do. Water carefully. A good syringing should be given on bright mornings to keep them free from mealy bug and red spider. Fumigate lightly and often for green fly.

Cinerarias sown in flats during July should be potted off as soon as they have made enough growth for a three-inch pot. A light sandy mixture should be used, say three parts fibrous loam, two of not too old leaf mold and a little sand. Keep them rather close and shade them for a few days, after which they may be placed well up to the glass in a cool house. Do not allow them to become dry, but on the other hand, they should not be kept soaked all the time. Never let them approach a pot-bound condition until they have reached flowering size. As soon as the pots are filled with roots, shift them along. They become most vigorous in a temperature of about 45 degrees at night.

MACAWI FERNS

A fresh lot of this fine new fern. They are in 2½-inch pots, are extra heavy and ready to be shifted into larger pots for Christmas sales and later.

Per 1000, \$200

Let us send you a sample 100 of this at the thousand rate and be convinced.

We can also do some not quite so heavy 2½ inch at \$18 per 100, \$150 per 1000.

BULBS: Clearing out now for the season. Send for our Bargain List.

C. U. LIGGIT, Office
303 Bulletin Bldg. Philadelphia, Pa.

FALL BULBS

VALLEY PIPS (Holland grown)

BEGONIA AND GLOXINIA BULBS

DUTCH BULBS, JAP. LILY BULBS

NARCISSUS, Emperor and Empress

PALM SEEDS, RAFFIA, BAMBOO CANES, Etc.

Write for Import Prices

McHUTCHISON & CO., 95 Chambers St., New York

IBOLIUM The New Hybrid HARDY PRIVET (L. Iboia x Oval- folium)

Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery.

The Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.

Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.

We are Headquarters for the BEST OF EVERYTHING IN VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

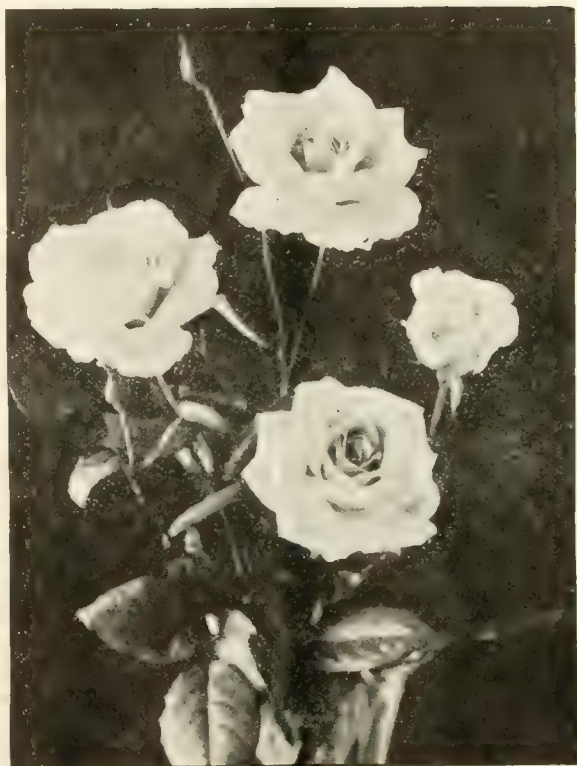
"Seeds with a Lineage" All Varieties
Thoroughly tested at our trial grounds, Raynes
Park, London, England. Send for Catalogue
CARTERS TESTED SEEDS, Inc. 166 Chamber of
Commerce Bldg. Boston, Mass.

IF in need of RELIABLE NURSERY STOCK
that is well grown, well dug and well packed
Send to the **BAY STATE NURSERIES**
Wholesale and Retail **NORTH ABINGTON, MASS.**

When writing to Advertisers kindly mention Horticulture

NEW H. T. ROSE CORNELIA

Ophelia X Mrs. Aaron Ward



A splendid cross between these well-known Roses. Flowers are medium to large size and very double. The bud is a beautiful salmon-pink. In the half expanded and full flowers the outer petals are light flesh, with the centre a bright Malmaison pink; base of petals bright orange. A strong, vigorous grower, with good stem and foliage. Needs no pinching for a commercial variety, and when cut is a splendid keeper.

We have grown this variety for three years, and with us we know it will be a very profitable variety because of its blooming and lasting qualities. No grower can make a mistake in planting it. We have a house of 3000 plants which have been the admiration of every one who has seen it.

**Visitors are cordially invited
to inspect this sterling variety.**

Own Root Plants—\$30 per 100; \$250 per 1000

Grafted Plants—\$40 per 100; \$350 per 1000

Grafting eyes—\$200 per 1000

ROBERT SCOTT & SON, Inc.

Sharon Hill, Delaware Co., Penn.

HORTICULTURE

Vol. XXX

OCTOBER 18, 1919

No. 16

THE TALK OF THE TRADE

It seems to me that there has been a decided scarcity of dahlias in use in the retail stores in Boston this year. Other years, if I am not mistaken, they showed up quite prominently in the market, but you could go through either of the markets this season and hardly see a dahlia. I know that in Philadelphia and in New York, they have been used in quantities. A lot of window decorations have been staged of this flower and talking with a traveler coming through from Philadelphia and New York, I learned that the florists in those cities have been using quantities for funeral purposes. I wonder what is driving them out of the Boston market? There certainly are plenty growing around Boston in as great variety as anywhere.

In looking through the houses of the smaller grower who has chrysanthemums for his own use in particular, you will always find Golden Glow as the first yellow. It is an overworked variety, but there is nothing to take its place for very early and up to the first of October. There seems to be also a general agreement regarding the first two white varieties, Early Frost, followed by Oconto, and Oconto gives a great range of possibility if the grower wants to produce some fancy blooms. This variety is very appreciative of good treatment. Good stock planted early and fed properly will throw blooms the equal of any of the sorts during any part of the season. It seems to me that we could very well take care of an extra early pink. Up to the time that Unaka comes along, there is nothing to depend upon and the best that can be said for Unaka is not over-complimentary.

I wonder if enough of the growers appreciate the real worth of that dandy early pompon, Niza? It is one of the first to appear and not hard to grow. It appeared on the Boston market as early as October 6th.

I am glad to show a good picture of the new fern *Nephrolepis Macawii* which was originated by Duncan Macaw, and which is arousing much interest. As is well known it is a

sport of *Scottii*, but it grows faster than *Scottii* and is superior in several ways. One salesman tells me that he carried a plant in his machine for a week or more, throwing it about and giving it the hardest kind of usage. Yet at the end of the trip it seemed in almost as good condition as at the start and actually making new growth. Such a fern is certainly a plant for the millions.

Colored flowers have been used so long for funeral work in the United States that it seems strange to find a discussion of such a question in other places. Up in Canada, however, the matter seems to be still unsettled. This fact is illustrated by the following from the Canadian Florist:

"Should colored flowers be used for funeral designs, or only the white ones? There is still a large school of florists who consider it improper to make designs with anything but white flowers, but these seem to be on the decrease. While the demand for white flowers still continues among many native-born Canadians, yet among the foreign sections there seems a craving for colored stock. Bright colors are natural to many European nationalities, and as the foreign element in Canada increases

so will the demand for colored flowers.

"In Paris, there is a great color revival affecting all trades and destroying some deep-rooted conventions. Even the Parisian funeral has undergone a change. In the place of wreaths of white flowers every tint is now to be seen. At a recent funeral where there was a great profusion of beautiful flowers, only crimson and deep pink roses were used, and at another all the wreaths were of blue hydrangeas and pink carnations.

"Some of our Canadian florists are advocating strongly the use of colored flowers. The Dale Estate of Brampton is an example, as they have used colored flowers in most of their designs sent out for funeral purposes during the last ten years."

BOSTON.

Wallace Pierson, of Cromwell, Conn., and Roman Irwin, of New York, stopped in Boston this week on their way home from Northern New York, where they went for a gunning and fishing trip. They had one salmon which excited the interest, if not the cupidity, of those who saw it.

Prof. J. G. Jack, of the Arnold Arboretum, is to lecture before the Gardeners' and Florists' Club next Tuesday evening.

C. T. Beasley & Co., of East Milton, the largest greenhouse pansy growers in New England, have flowers already blooming freely.



The New Fern *Nephrolepis Macawii*

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

Trade Prices on Application

R. & J. FARQUHAR & CO.
BOSTON, MASS.

BREITMEYER IS PRESIDENT

Indianapolis Gets the Next Convention of the F. T. D.

Although not quite so largely attended as the session last year the annual meeting of the F. T. D. A. at Buffalo, Tuesday and Wednesday, was highly successful and very profitable. It was an enthusiastic meeting and at least the second best in the history of the Association.

The meeting opened with an address by President Gude, which was called by many the finest ever listened to before any meeting of florists. Phillip Breitmeyer responded in a strong way and was very appreciative of the excellent remarks from Mr. Gude. Routine business followed, with reports from treasurer and secretary. It was voted to send a suitable offering of flowers to President Wilson. The secretary reported it to be the tin wedding of the F. T. D. (10 years).

The secretary was then presented a unique bouquet of tin kitchen utensils, etc. It certainly was a lively opening

meeting, with everyone in good humor and with a prosperous feeling all around. A tin washtub was sent around, and brought back full of money for the "Say it with flowers" campaign, about \$800.00.

It was voted to telegraph flowers to the mayor of every city from which a representative was in attendance with a card from the F. T. D. Flowers were also telegraphed to Cardinal Mercier, the King and Queen of Belgium, the Prince of Wales, and the widow of J. A. Valentine.

Invitations were received from Albany, Chicago, St. Louis, Frisco, New York, Chattanooga, St. Joe, Philadelphia, Toronto and Indianapolis, for next year's meeting. Philadelphia made a strong plea but Indianapolis had already been promised this year, with Kansas City promised to follow. Chas. Grakelow said, "I serve notice here and now that Philadelphia will be in Indianapolis next year with a pocket full of fight looking for the convention next year. Indianapolis received the vote for next year unanimously.

The election of officers resulted as follows by unanimous vote:

Phillip Breitmeyer, president.

Irwin Bertermann, vice-president.

The secretary and treasurer are appointive officers.

The committee appointed to judge retail store windows in competition for following prizes reported as follows:

Electric fountain, value...\$250.00

From A. L. Randall & Co.,
Chicago, Ill.

Henry A. Dreer, Inc..... 100.00
Flower Growers' Association,
Chicago..... 100.00

It was voted that the directors be instructed to present to the Association at the next regular meeting an

I have above my requirements. 500 Pot Grown Hydrangeas in mixtures. Top notch stock.

\$75 \$100 \$125 \$150
per 100

A. L. MILLER
JAMAICA N. Y.

amendment to the By-Laws providing for a salary to be paid the secretary and treasurer, also reimbursement to the secretary for office expenses.

On Monday a bouquet of flowers was sent to the editor of every evening paper, and it resulted in liberal reading notices, to say nothing of editorials where "Say it with flowers" was the keynote. In fact that slogan in Buffalo these few days is very much seen, heard and felt.

Those present at the meeting were greatly delighted with a handsome basket of the new Frank W. Dunlop rose. These roses showed up splendidly. Madam Butterfly was also shown and attracted attention.

Pres. Gude's Address.

Ladies and Gentlemen:—

One year ago when we met in the City of Cleveland, Ohio, we gathered under very different conditions from those existing today. Then we met overshadowed with gloom on account of the World War. Today we meet full of optimism, with prosperity written on our banner and our good ship sails along, so "Get into the right channel," concentrate and properly direct your efforts," and "Never put off for tomorrow what can be done today."

Our membership has more than doubled since our last meeting and resignations have been few. Our slogan, "Say It With Flowers" has



Phillip Breitmeyer, the New President

come to the front wonderfully in the last twelve months, and ere another twelve months goes by, we hope all F. T. D. A. members and others will have all their automobiles, boxes, tags, stationery, advertisements and in fact everything labeled with the slogan, "Say It With Flowers."

The highest compliment that can be paid to any individual or organization is the fact that another organization imitates them, so rather than feel alarmed at other organization imitating us, I see in it an advantage, because in order to do any business they will have to advertise, and by talking flowers they will help us. However, I see no need of any other organization composed of retail florists, because the F. T. D. A. with thousand of members can cover the field and give such service as it has in the past, service that was never dreamed of years ago. With the S. A. F. & O. H. in which nearly all of our members hold membership, and with a thorough publicity campaign, as is now organized and conducted we have no fear for the future.

Let us dwell for a moment on the sending and receiving of orders. That we may have the full confidence of the public, so that when called upon to produce the original order we must be ready and willing to produce the same. It is vitally necessary that all orders should be accurately written and accurately relayed so that the party receiving the order can correctly book it and fill the order for the full amount, giving if possible, better attention, in the way of service, than if the customer came in the store and ordered the flowers himself.

As to Bills.

In the matter of bills, there is much to be desired. In forwarding an invoice promptly upon delivery of the order and if for any reason the order could not be delivered, notifying the sender at once, giving the particulars. Bills should be mailed the first of each month and promptly followed up if not paid.

The clearing house under the leadership of our very efficient Secretary has done wonderful work in having members and others pay up more promptly and also collecting bills that have not been paid. This office has done phenomenal work in the short time in which it has existed.

Our Officers.

Too much praise cannot be given to our worthy Secretary, Mr. Albert Pochelon, who has worked morning, noon and night to push the F. T. D. A. He has been such an engineer in the workroom of our organization that we

cannot help but esteem him highly. All honor and praise to our Secretary.

Much credit is due our Vice-President, Honorable Philip Breitmeyer, for so ably officiating during my recent illness. He was ever up and doing, alert to attend to all matters which would help boost the F. T. D. A. Also our honored Treasurer, Mr. William L. Rock, who is ever ready with good advice, prompt and correct in his records as his report will show; and also our past President, Mr. Irwin Bertermann, to whom we owe a great deal for putting the Association on its feet, and who is ready and willing to give good friendly and substantial advice.

To Mr. George Asmus, our former Vice-President and President of the National Flower Show Committee, who has labored unselfishly for the florist trade in general and the F. T. D. A. in particular, and to the members of the Board of Directors who have been ever ready and willing to do their duty, I extend my cordial thanks and best wishes.

Orders.

Small orders should be discouraged, particularly on the rush days. However, if a party is willing to pay the price, there should be no order too small to relay and give the accommodation which the order deserves. The question of whether it pays or not should not enter into these transactions, for who will say that it is not a good advertisement. Often the filling of a small order carefully is worth many times the price of the order in advertising.

Publicity Fund.

Everybody should contribute. It matters not how much one gives, but how many are giving. Just think twenty thousand florists at five dollars each would be a hundred thousand dollars and surely we should average five dollars per florist. Our publicity with our slogan, "Say It With Flowers" has done wonders and I cannot help, but feel that the florists business is in its infancy and will go

forward by leaps and bounds, in fact faster than some of us will be able to keep up. In these days of the high cost of living, and the high cost of flowers, it behooves us all to make the most of the least, to give our customers perfect satisfaction in every way so that when the time comes when the great majority of people will want flowers in their homes we will know how to supply them.

In every industry, we should remember that the government treated us with great consideration during the coal shortage, and men engaged in their respective industries should bear this in mind and remember that we were shown a certain degree of favoritism. At this time when the government is making investigations on all sides to inquire into the high cost of living and the high cost of almost every article of merchandise, it does seem to me that the growers, as well as the dealers and commission men should hold themselves down to a reasonable margin of profit, so that if they for any reason are investigated, they could show by their records that they are dealing with the public and their fellowmen on an absolutely square basis.

Associations are all too willing and ready in times such as these to "get-together" and set a minimum price and value, and I am of the opinion that it is a bad thing to do. And I would certainly counsel the advisability of letting every grower, every wholesaler, every dealer determine for himself and according to his own records what constitutes a fair and reasonable profit, and at what price he shall sell to the public.

Association of members in any given trade should be strongly counselled, for there is no question in my mind that every association can exert a powerful influence for good, but it must always be borne in mind that the power of each such association should not be abused, but always exercised for the general welfare of businesses.

(Continued on page 336)

ALL IMPORTED BULBS

DUTCH—FRENCH—JAPANESE AT TRADE PRICES

Keep your Counter Display Alive

Nothing Better than Bulbs and None Better than Ours

Moderate cost. Big Profits. No Loss

Tulips, Hyacinths, Narcissus

Finest in Cultivation

Write for "Book for Florists"

43 Barclay St.
New York City

Vaughan's Seed Store

33 W. Randolph St.
Chicago, Ill.

HORTICULTURE

Established by William J. Stewart in 1904

VOL. XXX

OCTOBER 18, 1919

NO. 16

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For inch, 30 inches to page..... \$1.85
 Discount on Contracts for consecutive insertions, as follows:
 One month (4 times), 5 per cent.; three months (12 times), 10
 per cent.; six months (26 times), 20 per cent.; one year (52 times),
 30 per cent.
 Page and half page space, not consecutive, rates on application.

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One Year, in advance, \$1.00; To Foreign Countries, \$2.00; To
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Entered as second-class matter December 8, 1904, at the Post Office
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F. T. D. A.
 lessons

Nobody who has at heart the interest of the trade should fail to read the annual address delivered by President Gude at the annual address delivered by President Gude at the annual meeting of the F. T. D. A. in Buffalo this week. Seldom does such an address cover the ground so fully or contain so many worth-while suggestions. Special attention is called to what is said about bills and small orders. There are few events in the day's work more annoying than those which have to do with delayed, carelessly written or overlooked bills. There are matters pertaining to bills which will even strain a friendship. As it is pointed out, the clearing house of the association has done excellent work in putting matters of this kind on a more efficient basis; but after all it is the individual who must be held responsible in the end, and to the degree with which all co-operate does the success of an organization like this depend.

In the matter of small orders, there are possibilities which many florists often overlook. The man who is planning for the future must not despise the small orders, for they are the foundation of big orders to come. Moreover, a small order filled with as careful attention to detail as in big orders will prove a most profitable kind of advertising. The truth is that no concern ever gets too big to cater to the small customer. It is in this way that an introduction worth many dollars is often made.

This leads on naturally enough to Mr. Gude's remarks about advertising in general. There are two things which mark the man of narrow business perceptions. One is the failure to take one or more trade papers, and the other is the failure to appreciate the importance of advertising. Advertising is truly the life of trade, but this does not mean any kind of advertising. Much

money is thrown away through advertising which does not advertise. Buyers in the trade are always complaining because sellers do not specify just what they have to offer and what it costs. Advertising in the trade offers a direct and most profitable connection between those who sell and those who buy. Trade advertising holds far greater possibilities than has as yet been realized. It is worthy of more thought and study than has been given it on the part of advertisers.

Advertising for the general public is on a somewhat different basis, although fundamentally the same principles apply. In trade advertising the buyer usually knows what he wants and looks in the advertisements to find where he can buy it or buy it to the best advantage. In general advertising, the suggestion to the possible customer that he needs a certain thing is more often what counts. He is led to feel a want which he had not before recognized and accordingly takes the first opportunity to gratify that want. It takes some nerve to advertise a new business when the amount of invested capital is small, but fortunes have been made just because this nerve was displayed. The man who hasn't the nerve to advertise usually remains a small business man, in the florist trade as in other lines of endeavor.

President Gude's ideas about the proper education of salespeople is of special importance to retail florists, especially those who have a considerable staff. The amount of good or harm which a single salesman can do a business is astonishing. With the right kind of approach, it is not a difficult matter for a salesman to win many new customers for his firm. If, on the contrary, he meets customers with a rebuff or with an indifferent air or an appearance of being bored because the order is likely to be only a small one, these customers are very likely to be driven away. Many times it pays well to have regular meetings for the discussion of sales problems. It may even be worth while to get in an expert to talk on the subject. Instructions or admonitions from the boss may not be enough. The boss may not know it all. Usually he can learn something, and at a get-together meeting many matters of importance to all concerned come to the surface.

Of course it is impossible to enlist the hearty co-operation of the salesforce unless they feel they are being well and considerately treated. Sunday closing and shorter hours have their effect in creating a better atmosphere in store or shop. It is a fact that stores which have adopted the most liberal plans have usually been the most successful. The florists can well afford to be more independent than they have been in the past. The public has been educated to a new order of things. If the florists do not fall into line, the public will think that something must be wrong with their business or that it is on a different plane from others, which is not true.

Of course Mr. Gude in his able address did not elaborate all these matters to the extent which has been done here. Perhaps, indeed, he would not endorse or approve all the statements in this editorial, but what he said opened up so many avenues of thought that it has been easy to wander down them, stopping occasionally to consider what in time may prove to be a milestone in the evolution of the florists' trade.

George Watson's Corner

"You in your small corner and me in mine."

George C. Watson extends his thanks to "William Jennings Bryan" for cordial greetings on his 58th birthday which occurred October 6th last. The silver souvenir which accompanied these greetings—one round, sixteen-to-one cartwheel, for every year—was also greatly appreciated and conveyed the sentiments of the donor in most appropriate fashion. When one wants to "say it with silver" a 100 per cent standard American dollar has a silver loving-cup skinned a mile. When the recipient was opening the package from "Lincoln, Neb." he thought from the weight of it that it was either a small jug of the light wine of Scotland or a gold brick. He was agreeably surprised and became at once converted from the gold to the silver standard. If old Bill Harris were alive he would chortle with glee.

The S. S. Pennock Company had on exhibition on the 8th inst. an exhibit of the new dahlia Jean Kerr. This is the variety so highly thought of as a commercial white mentioned in our last week's issue. The flowers were sent in by George W. Kerr, the raiser, from the parent stocks on the Burpee Farms at Doylestown and created quite a lot of favorable comment from both growers and buyers. This is an excellent way of telling the story to those interested, as there are hundreds who visit this big commercial cut flower market every day, and are always anxious to keep in touch with anything new and good. The Pennock market is really better than a flower show in some ways, for exhibition purposes.

Lord & Burnham Co., have completed a new house 150 x 36 feet for Macaw Bros., Norwood, Pa., in their latest up-to-date style. It is now full of Cyclamen plants for the Christmas market and after that will be used for Rambler Roses in pots for the Easter trade. Messrs. Macaw have earned a splendid reputation as expert growers of these plants and their products are generally about the best going. Their new fern *Nephrolepis Macawi* has taken a firm hold on public esteem, and increased area will be devoted to it next season.

The chief feature of the cut flower market here this week so far as a listener can make out is that the men with glass are praying for a frost and the men with outside stuff like dahlias are praying for mild weather. If both prayers are equally sincere, and they seem to be, how is the Almighty going to grant the wishes of both parties. That is the question. Reminds one of the old story about the parish clergyman praying on Sunday for the success of Wellington against Napoleon. Wasn't that a fine prayer, said one old lady to another, discussing the service on the way home. Aye, said the other but what if the French were putting up the same prayer for Napoleon? Hoot, says the first one there's nothing to that. The Lord would never understand them jabbering buddies. According to that theory it will make a difference what kind of language the glass folk or the outdoor folk use in their prayers.

I ran across Howard M. Earl in Broad Street Station this morning. Last I heard of him he was in Frisco about a week ago. Asked him whether he was coming or going. He said both. That so. How could it be both ways at once. Well, said he, I'm just in from Frisco and I'm just off for New York. Would you call that a "transitory state," or would it be rapid-transitory like Niagara Falls or the street cars in Fast Philadelphia? Anyway Howard is some traveler. Within the past eight months he has been in Frisco, Paree, Rome, Buenos Ayres, Detroit, Stockholm, London, Doylestown, Froghollow, Swampoodle and Fishtown, not to mention a few minor places like New York, Washington and Boston. I think he avoided Chicago for fear he'd meet Mayor Thompson or some other hot stomached Bolshevik liable to eat him up. Anyway he is some traveler and one may form from this bald and uninteresting paragraph some faint notion of the wide extending interests of the great seed firm he represents, Jerome B. Rice & Co. of Cambridge, N. Y., U. S. A.

The annual Chrysanthemum Show of the Pennsylvania Horticultural Society will be held in the First Regiment Armory at Broad and Callowhill Streets, commencing on Wednesday, November 5th and continuing for four days. Intending exhibitors and those desiring premium lists or other information should address the secretary, David Rust, 606 Finance Building, South Penn Square, Philadelphia. This is the big event of the year for

PEONY BARGAIN

3000 Festiva maxima
3000 Duchess de Nemours
900 Madame Ducl

The three finest cut flower varieties; divided roots; Pennsylvania grown; immediate delivery. The regular trade prices on these run from \$20.00 to \$25.00 per 100, but to move them quickly we offer for prompt order and if unsold, in lots of 250 or over at

\$15.00 per 100

If you can use 1000 or more will make the price

\$13.50 per 100

S. S. PENNOCK COMPANY

1614 Ludlow Street, Philadelphia

this society and is popularly known to outsiders as "The Philadelphia Show". The list of prizes for roses, carnations and other flowers are extensive; and plants and vegetables are also well taken care of.

The Dreer windows at 716 Chestnut street were very handsomely decorated for Flower Week, Oct. 13, 1919. The center of each was a large basket of dahlias surrounded by crotons, ferns and other foliage plants artistically arranged. The Say It sign had a prominent place in the background

We tried to stagger Bart Cartledge the other day by asking him twenty dollars a hundred for valley sprays, but it did not seem to phase him any. All he said was lets see them! An old timer who was standing by got interested and began telling about having made a New Year basket once, back in the seventies with a hundred sprays of valley in it and he got a dollar a spray for them. Sounds like an orchid tale for valley, but even at twenty they are pretty near in the orchid class again.

LARGE GREENHOUSE BOILER FOR SALE

Fire Box Type, designed for Hot Water—No brickwork required—Can be seen at the shop of

NEW ENGLAND IRON WORKS CO.
365 Summer St., Boston, Mass.

FOR
KANSAS CITY
Transfer Your Orders to
SAMUEL MURRAY
1017 Grand Avenue
Member Florists' Telegraph Delivery

DARDS FLOWER SERVICE

has spelt **GUARANTEED SATISFACTION** for nearly FIFTY YEARS.

Regular European sailings now established. Let us fill your orders for **Steamer Flower Baskets, Corsages and Artistic Boxes of Cut Flowers.**

DARDS, Inc., Florist,
341 Madison Ave., New York

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440 Main St., Buffalo, N. Y.

ANDERSON service means fresh, sturdy Stock and prompt deliveries in **BUFFALO, LOCKPORT, NIAGARA FALLS and WESTERN NEW YORK.**

Member Florists' Telegraph Delivery

HESS & SWOBODA FLORISTS

Telephones 1501 and L 1535

1415 Farnum St.

OMAHA, NEB.

THE KNOBLE BROTHERS CO.

Flowers and Nursery Products

Member Florists' Telegraph Delivery

We are well equipped to handle your orders.

1836 W. 25th Street CLEVELAND, O.

THE SMITH & FETTERS CO.

735 Euclid Avenue

CLEVELAND, OHIO

Flowers of Every Kind in Season

PHILADELPHIA

CHAS. H. GRAKELOW F.T.D.

Everything in Flowers

Broad Street at Cumberland

The Park Floral Co.

B. E. GILLIS, President.

E. P. NEIMAN, Secretary.

Member Florists' Telegraph Delivery

DENVER, COLORADO

IN THE
National Capitol
At your service to deliver Flowers or Designs on Order by Telegraph or otherwise. Prompt Reliable Service.
GEORGE H. COOKE
Connecticut Ave. and L St.
WASHINGTON, D. C.

FLOWER WEEK FOR BOSTON.

The Florists' Association Takes Important Action.

The Boston Florists' Association opened the fall season with a dinner meeting at the Parker House, Friday evening, Oct. 10th, President Henry Penn presiding. There was a very creditable attendance and there is every indication that this organization is a live one and bids fair to stay alive. It is composed of all branches of the trade, and for this reason it is planned at the monthly meetings to discuss and thresh out a general line of topics which interest the different groups of the florist industry, such as wholesaler, retailer, grower and all other branches.

The speaker of the evening was T. M. B. Hicks, secretary of the Retail Trade Board of the Boston Chamber of Commerce. The backbone of his talk was co-operation and its connection as regards retailers, growers and other branches of the trade. He called attention to the various special weeks which other industries make use of in an advertising way. Fashion week in particular was mentioned.

It was decided at the meeting to have a committee go into the matter at once of holding a "Say it With Flowers" week, and it was thought best to set the date for Armistice Week. The idea took a strong hold, and within a few moments over \$700 was raised from those present towards expenses.

The table decoration, a very well-grown vase of Chrysanthemum Oconto, was contributed by the W. W. Edgar Co., Waverley.

W. A. McAlpine, of Exeter, and John A. MaDan, of Green Harbor, have returned from a highly successful hunting trip in Maine. They bagged four deer and 20 ducks.

**MaSchling
Flowers**
Schling Service
Nothing Better
785 Fifth Avenue, New York City
"Says It With Flowers"

CLEVELAND A. GRAHAM & SON

5523 Euclid Ave.

Will take good care of your orders

Members of F. T. D. Association.

DAVID CLARKE'S SONS

Deliver orders from any part of the country to

New York City

Write or Telegraph

2139-2141 Broadway, - New York

Telephone 1552-1553 Columbus

KOTTMILLER, Florist

426 Madison Ave. and 49th St., New York. Also Vanderbilt Hotel

Telephone, Murray Hill 783

Out-of-town Orders Solicited. Location Central. Personal Attention.

Member F. T. D. Asso.

G. E. M. STUMPP

761 Fifth Ave.

NEW YORK CITY

Member Florists' Telegraph Delivery Asso.

A. T. BUNYARD

NEW YORK

413 Madison Ave. at 48th Street

I GUARANTEE SATISFACTION

MEMBER F. T. D. A.

THE J. M. GASSER COMPANY,

CLEVELAND

Euclid Avenue

The Far-Famed Flowers of

TORONTO

Delivered on mail or telegraph order for any occasion, in any part of the Dominion.

JOHN H. DUNLOP

10 West Adelaide St. - TORONTO, ONT

When writing to advertisers kindly mention **HORTICULTURE**

Penn
The Florist

"The Telegraph Florist"
Member of Florists' Telegraph Delivery
124 TREMONT ST.
BOSTON

H. F. A. LANGE

Worcester, Mass.

Delivers to all Points in New
England

150,000 Square Feet of Glass

Member Florists' Telegraph Delivery
Association

WORCESTER, MASS.

Randall's Flower Shop

HARRY I. RANDALL, Proprietor.
Member Florists' Telegraph Delivery

Providence, Rhode Island
Johnston Brothers
LEADING FLORISTS
38 Dorrance Street
Member Florists' Telegraph Delivery

Quality and Reliability
WARBURTON

FALL RIVER, MASS.

Deliveries of Flowers and Plants
to FALL RIVER and contiguous
territory.

The Beacon Florist
Beacon Street, **BOSTON**
Near Tremont

J. EISMAN, Manager. 14 years head
decorator and designer for Penn's.
Prompt, Efficient Service Guaranteed.

Zinn
The Florist
Park St., Boston

Flowers by Telegraph

Leading Retail Florists Listed by
Towns for Ready Reference. Orders
transferred by telegram or otherwise
to any of the firms whose address is
here given will be promptly and prop-
erly filled and delivered.

Boston—Penn the Florist, 124 Tremont St.
Boston—Zinn the Florist, Park St.

Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.

Buffalo, N. Y.—S. A. Anderson, 440 Main
St.

Cleveland, O.—J. M. Gasser Co., Euclid
Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th
St.

Cleveland, O.—The Smith & Fettes Co.,
735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643
Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New
Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017
Grand Ave.

Lawrence, Mass.—A. H. Wagland.

New York—David Clarke's Sons, 2139-
2141 Broadway.

New York—A. T. Bunyard, 413 Madison
Ave., at 48th St.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
son Co.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—H. F. A. Lange.

Worcester, Mass.—Randall's Flower Shop,
22 Pearl St.

HIGH GRADE PLANTS

For Retail Stores a Specialty

ASK FOR LIST

THOMAS ROLAND, Nahant, Mass.

LAWRENCE - - MASS.

A. H. WAGLAND

We Cover

LAWRENCE, METHUEN, ANDOVER,
NORTH ANDOVER, SALEM, N. H.
and Contiguous Territory
Member of F. T. D.

**JOHN BREITMEYER'S
SONS**

Cor. Broadway and Gratiot Aves.
DETROIT, MICH.

**Artistic Designs . . .
High Grade Cut Blooms**

We cover all Michigan points and good
sections of Ohio, Indiana and Canada.
Members Florists' Telegraph Delivery
Association.



GUDE BROS. CO.
WASHINGTON, D. C.

Member Florists Telegraph Delivery

WILSON BROOKLYN

Main Store
3 and 5 Greene Ave.
NEW YORK
Member Florists' Telegraph Delivery Asso.
Phones, Prospect 6800-6801-6802
DELIVERIES IN NEW YORK, BROOK-
LYN and LONG ISLAND

FLOWERS The Best at
The Lowest



"I SERVE"

The Largest Popular Priced House in
Philadelphia

F. M. ROSS

Send orders to
136 So. 52nd Street, Philadelphia.
Other Stores
18 So. 60th St., 212 E. Girard Avenue

PHILADELPHIA

Member Florists' Telegraph Delivery
Orders from all except members of
the F. T. D. must be accompanied by
remittance.

When writing to advertisers kindly
mention HORTICULTURE

BOSTON FLORAL SUPPLY COMPANY

Wholesale Florists

DEALERS IN

Cut Flowers and Evergreens

We manufacture our Baskets, Wax flowers, Wax designs, Wire frames, etc., and preserve our Cycas Leaves right in our own factory.

Office, Salesrooms, Shipping Dept.

15 Otis St. 96 Arch St.
BOSTON, MASS.

Telephones, Main 2574, 3525

For All Flowers in Season Call on

THE LEO NIESSEN CO.

1201 Race St. Philadelphia, Pa.

EDWARD REID

WHOLESALE FLORIST

1619-21 Ranstead St., Philadelphia, Pa.

CHOICE BEAUTIES, ORCHIDS, VALLEY, ROSES
and all Seasonable Varieties of Cut Flowers

Wired Toothpicks

Manufactured by

W. J. COWEE, Berlin N. Y.

10,000...\$2.25 50,000...\$9.75 Sample free.
For Sale by Dealers

GEORGE B. HART

WHOLESALE FLORIST

24 Stone St., Rochester, N. Y.



(Continued from page 331)

Flower Week.

I believe that no greater boost to the florist business can be inaugurated than by having one week set aside to "Say It With Flowers" in every city in the United States and Canada. The first week in November seems to be the best time to "Say It With Flowers." This should be done by liberal advertising and having our stores make a special effort to be decorated in holiday dress, also advocating the liberal use of flowers, and it might be well for us to recommend to the public that everybody wear a flower in memory of the heroes who lost their lives during the World War.

Another idea that might well be worked out is to send flowers to all the mothers, wherever possible, of the heroes who lost their lives during the recent war.

In larger cities and towns, floats similar to the one used in Washington to celebrate the homecoming of General Pershing and the First Division, may be used to distribute flowers to hospitals. The floats may first pass through the principal streets of the city and then drive to the hospitals, where many of the convalescents can enjoy them, before distributing the flowers. Then have a bunch of fresh flowers to hand to everyone of the sick or disabled. In cities where there are no hospitals, floats may well be used to carry flowers to the sick.

Money for advertising judiciously spent, plenty of flowers to give away in a proper manner, all would tend to make the "Say It With Flowers" week an annual event looked forward to by all, as one of the most pleasing events of the whole year. I hope some action will be taken at this meeting to give approval to these suggestions.

Advertisements.

The farmer does not fail to sow his seed every spring because there have been crop failures in the past. Advertising, like seed, has reproductive power, and the man who neglects to plant his seed in rich soil, or his savings in good investments, simply robs himself of an opportunity to reap a crop or win a fortune. Do not be afraid to take the risk. People in all parts of the world have made fortunes through judicious advertisements. They won simply because they had the nerve to risk.

Sales.

We cannot do too much in educating our salespeople in taking orders when a person has only a few dollars to spend, in making them feel that they

H. E. FROMENT

Wholesale Commission Florist
Choice Cut Flowers

New Address, 145 West 26th St., NEW YORK
Telephones: 2390, 2501, Madison Square.

WM. P. FORD

Wholesale Florist

107 W. 28th Street, NEW YORK

Telephone 5335, Farragut.
Call and inspect the Best Establishment
in the Wholesale Flower District.

WALTER F. SHERIDAN

Wholesale Commission Dealer in

CHOICE CUT FLOWERS

133 West 28th Street, New York
Telephones: 4234, 5855 Madison Square

E. G. HILL CO.

Wholesale Florists

RIEHOOND, IND.

Please mention Horticulture when writing.

REED & KELLER

122 West 25th St., New York

Florists' Supplies

We manufacture all our
Metal Designs, Baskets, Wire Work & Novelties
and are dealers in
Decorative Glassware, Growers and
Florists' Requisites

THE KERVAN CO

Fresh Cut Decorative Evergreens.

Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
Catalog of Greens and Florists' Supplies
119 W. 28th St., - NEW YORK

WILLIAM H. KUEBLER

Brooklyn's Foremost and Best

WHOLESALE COMMISSION HOUSE

A First Class Market for all CUT FLOWERS
28 Willoughby St., Brooklyn, N. Y.

WE WANT MORE SHIPPERS

We have a numerous clientele of New York City buyers and the demand exceeds our supply. This is especially true of Roses. We have every facility and abundant means and best returns are assured for stock consigned to us.

Address Your Shipments to
UNITED CUT FLOWER CO., INC.
111 W. 28th St., New York
D. J. Pappas, Pres.

HENTZ & NASH, Inc.

Wholesale Commission Florists

55 and 57 West 26th Street
Telephone No. 755 NEW YORK
Farragut

are welcome and that the order will receive the same care as if the purchase had been a large one. Again frequently the mistake is made in selling an inexpensive article when a more expensive one would do better. This is particularly true in taking orders for out of town. Many times roses may be two or three dollars a dozen, when in the city in which they are to be delivered they will be six or seven, or vice versa. In such a case, particularly during the holidays, it is always well not to specify the color of the flowers, nor even the kind, leaving it entirely to the florists to send the best for the money. Along this line there is a great deal of work for all of us and much can be accomplished towards making large orders out of small ones and orders that would be hard to fill easy to put up and deliver satisfactorily.

Sunday Closing.

Some have already closed their stores all day Sunday. In fact, I know of several florists who have never opened their stores on Sunday or sold flowers on Sunday and in some instances have made enough to retire and live comfortably for the rest of their lives. If this be true, why must the average florist feel that it is necessary to sell flowers seven days a week. Surely the time is not far distant when all first-class florist shops will remain closed all day Sunday.

Shorter Hours.

In these modern times when all other business and trades are working shorter hours the retail florists can no longer expect to hold their help and work them twelve and fifteen hours a day, when there is little need for a retail store to keep open after 6 o'clock in the evening. In several large cities stores have already closed for a number of years at 6 o'clock during the week days and for a half day on Sunday.

Cultivate a closer acquaintance with your competitor; touch elbows with him as frequently as you can that by virtue of friendly contact each may derive a higher personal regard for the other and the heart blossom into more comprehensive understanding of what is meant by the "Brotherhood of Man" and as we move onward day by day toward the "eternal unknown" may all of us become more and more imbued with the spirit, beauty, and force of the greatest, grandest and most imperishable of all teachings, as virile today as nearly twenty centuries ago, when the Master spoke and said:

"Therefore all things whatsoever ye would that man should do to you do ye even so to them."

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

**IF You Want Anything from Boston Get It
From Henry M. Robinson & Co.**

For Safety Place Your Orders With Us

HENRY M. ROBINSON & CO.
2 Winthrop Square and 32 Otis Street, BOSTON, MASS.

NOW Is The Time to Stock Up

We Offer for the Month of October the Following

CARD AND ENVELOPE SPECIAL

No. 36 White $3\frac{1}{4} \times 2\frac{1}{4}$, regular florist card, at \$2.25 per thousand, \$10.00 per five thousand. Envelopes to match at same figure. We carry 70 sizes and grades of stock on hand at all times and can satisfy any need immediately.

Samples of Cards, Envelopes and Gold Letters Upon Request.

ANITA SPECIALTY CO., 77 Summer Street BOSTON, MASS.
P. O. Box 2376

"THE FLORISTS' CARD HOUSE OF AMERICA"

B. A. SNYDER CO. *Wholesale Florists . .*

Hardy Cut Evergreens, Cut Flowers and Florists Supplies

21-25 Otis Street, BOSTON, MASS.

Telephone Fort Hill 1083-1084-1085

WILLIAM F. KASTING Co. Wholesale Florists

568-570 WASHINGTON STREET - BUFFALO, N. Y.

New England Florist Supply Co.

276 Devonshire Street,

BOSTON, MASS.

Telephones, Fort Hill, 3469 and 3135

MICHIGAN CUT FLOWER EXCHANGE, Inc.

WHOLESALE COMMISSION FLORISTS

Consignments Solicited

Hardy Fancy Fern Our Specialty

264 RANDOLPH ST., DETROIT, MICH.

The House for Quality and Service

ZECH & MANN

*We are Wholesale Florists Doing
a Strictly Wholesale Business*

30 East Randolph Street, CHICAGO

**When Writing to Advertisers Kindly
Mention HORTICULTURE**



Sim's
Yellow Polyanthus
The Best on the Market

Winter flowering clumps
ready now.

\$8.00 per 100 \$75 per 1000

L. J. REUTER CO.

PLANT BROKERS
329 Waverly Oaks Road
Waltham, Mass.

SEEDS AND BULBS
Boddington's
128 Chambers St., N. Y. City

BOBBINK & ATKINS
NURSEYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's Fund for Market Development, also "Say It With Flowers" Publicity Campaign.

GARDEN SEED

BET, CARROT, PARSNIP, RADISH and GARDEN PEA SEED in variety; also other items of the short crop of this past season as well as a full line of Garden Seeds, will be quoted you upon application to

S. D. WOODRUFF & SONS
82 Day St., NEW YORK and ORANGE CONN.

BURNETT BROS.
Seeds, Bulbs, Plants
Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

W. E. MARSHALL & CO.
SEEDS, PLANTS AND BULBS
Horticultural Sundries
66 W. 23rd St., NEW YORK

NEW YORK.

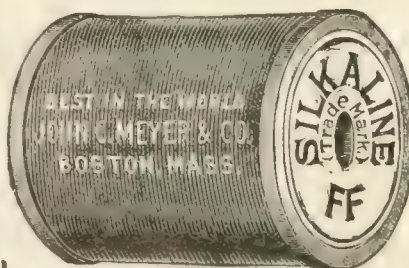
Manuel Oppenheim, who recently returned from service overseas, has purchased Layton's Flower shop located in the Olean House block at Orleans. The store is closed for remodeling and as soon as finished will be opened as a flower shop.

William R. Dougherty is estimating on plans for a greenhouse and service building at the League Island Navy Yard.

The Quality Flower Shop, of Buffalo, has filed articles of incorporation with a capital stock of \$10,000. The incorporators are William S. Caywood, Raymond Voght, Louis Sterns, Buffalo.

EXHIBITION AT TARRYTOWN.

The 21st Annual Exhibition of the Tarrytown, N. Y., Horticultural Society will be held at Music Hall, November 5 to 7. Undoubtedly Chrysanthemums will take the lead, but fruit and vegetables as well as other flowers will be shown. This is a live Society and a study of its prize list should be profitable to members of other Societies. A labor bureau has been established by the Society to assist in securing positions for superintendents, gardeners and assistant gardeners who may be out of work; also to assist in obtaining good men for private estates. Any member or friend of the Society who is in need of a superintendent or gardener, or any member or gardener seeking a position may communicate with the Secretary, Mr. Edward W. Neubrand, who will with the Labor Bureau Committee, assist him in every possible way.



The Meyer Florists' Green Thread is different from any other make. Every spool contains 2 ounces of actual thread, 16 ounces to a pound. See that you get the Meyer Florists' Green Thread and you will get the very best thread in the world. Don't take any substitutes.

Manufactured by
John C. Meyer Thread Co.
BOSTON, MASS. Mills at Lowell, Mass.

PURITY
FREESIAS

A fine lot of bulbs from a late dug, well ripened crop has just been received from our grower. Freesias are a splendid late winter crop, and now is the time to plant to bloom them. Easily grown, with little or no trouble. Better play safe and let us send you a thousand

PRICE, FIRST SIZE BULBS

\$10.00 per 1000; per 100, \$1.25
Will send them parcel post insured at this price if you mention it at the time of ordering. Make no mistake, you will be pleased with these bulbs.

Also all Other Seasonable Bulbs, Seeds and Supplies.

NEW GIANT COLORED
FREESIAS

These varieties are equal to the "Purity" in size; have excellent form and splendid texture.

	Doz.	100	1000
BLUE	\$1.25	\$8.00	\$75.00
LAVENDER	1.25	8.00	75.00
PINK	1.25	8.00	75.00
MIXED. All colors. ..	.75	5.00	40.00

Send for New Wholesale Price List, if you do not receive a copy.

MICHELL'S SEED HOUSE

518 Market St., Philadelphia

JUST OUT

BOLGIANO'S 1919 SUMMER AND FALL CATALOG OF "BIG CROP" SEEDS

Special Prices for
Florists and Market Gardeners.

Write for a copy at once—it will save you money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.

STUMPP & WALTER CO.

Seeds and Bulbs

30-32 Barclay Street
NEW YORK CITY

SEEDS, BULBS, PLANTS
JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden
Bronx Park NEW YORK CITY

THE BOILER OF Unequalled Fuel Economy

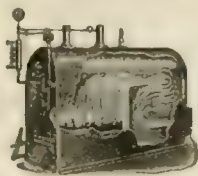
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN

Often, our estimate of a public man, or any other man who is held up to us as one whose teachings should be followed, is formed upon the fact whether he practices what he preaches. Henry Penn of Boston, has, perhaps, shouted for publicity for flowers as loudly as anyone. The following letter evidences that he practices what he preaches:

"Boston, Mass., Oct. 7, 1919. Dear Mr. Young:—Enclosed please find cheque, for which kindly send receipt in full for \$400, my yearly subscription. I feel that this money is being used for the best campaign that ever was originated—for the best results that ever a campaign could offer. Accept same with my best wishes. Yours very sincerely, Henry Penn."

We know of a number of florists who do not hesitate to pronounce our Publicity Campaign as the best incentive to business ever undertaken. They believe in it, and admit a personal share in the splendid results. But—they do not subscribe to the Fund. They are not in Henry Penn's class—they are just plain preachers.

The campaign has been fortunate in having twenty-five other enthusiasts such as Mr. Penn, and who together, have subscribed about one-seventh of the total amount collected to date. Here they are: A. N. Pierson, Inc., Cromwell, Conn., \$500; Gude Bros. Co., Washington, D. C., \$200; J. F. Ammann, Edwardsville, Ill., \$200; Peter Reinberg, Chicago, \$200; John Breitmeyer's Sons, Detroit, \$600; Sam Murray, Kansas City, Mo., \$200; W. L. Rock Flower Co., Kansas City, \$200; Stuppy Floral Co., St. Joseph, Mo., \$200; Hess & Swoboda, Omaha, Neb.,

\$200; Bobbink & Atkins, Rutherford, N. J., \$250; C. H. Totty, Madison, N. J., \$200; Lord & Burnham Co., New York, \$200; New York Cut Flower Co., \$250; W. J. Palmer, Buffalo, \$200; F. R. Pierson, Tarrytown, N. Y., \$250; Max Schling, New York, \$300; G. E. M. Stumpp, New York, \$300; C. E. Critchell, Cincinnati, \$200; J. M. Gasser Co., Cleveland, O., \$200; Joseph Heacock Co., Wyncote, Pa., \$500; Leo Niessen Co., Philadelphia, \$250; S. S. Pennock, Philadelphia, \$500; H. H. Battles, Philadelphia, \$500; Wilcox & Sons, Council Bluffs, Ia., \$200.

Just think of it, these few florists, many of them growers and wholesalers, taking upon themselves this large share of our financial load! Not one of them has subscribed less than \$200 per year. And yet there are nearly 15,000 florists who are to benefit from our campaign who have not subscribed a penny.

All praise is due to the others who have helped to swell the fund. Even as small a subscription as \$5 is acceptable, and helps—there is no dictation as to what a man ought to subscribe.

It's the spirit of the thing that counts.

We have now passed our period of summer dullness, and the conditions are ripe for several prosperous months ahead, and prosperity will materialize if our committees are able to carry out the plans on which they are now engaged. It is up to those who have not subscribed to make this possible—those who have already contributed should have the hearty thanks of all for the magnificent success so far enjoyed.

We have attracted the attention of the public to our products, and our slogan "Say it with Flowers" is working continuously to our advantage, bringing to the florists all over the country business which without it would not be forthcoming. Can anyone in the trade really afford to withhold support from such a business-bringing movement? It should be a privilege and a pleasure to subscribe.

Contributions are urgently needed now. This is the time to rally to our campaign standard.

JOHN YOUNG, Secy.
1170 Broadway, New York.

WHOLESALE FLOWER MARKETS—TRADE PRICES—Per 100 TO DEALERS ONLY

	BOSTON Oct. 13	NEW YORK Oct. 13	PHILA. Oct. 13	CHICAGO Oct. 13
Roses				
Am. Beauty.....	8.00 to 40.00	8.00 to 40.00	15.00 to 50.00	15.00 to 50.00
Hadley.....	4.00 to 20.00	4.00 to 20.00	8.00 to 15.00	8.00 to 15.00
Hoosier Beauty.....	6.00 to 20.00	..... to	4.00 to 10.00	4.00 to 10.00
Killarney.....	3.00 to 16.00	1.00 to 5.00	3.00 to 8.00	3.00 to 8.00
White Killarney.....	3.00 to 16.00	2.00 to 16.00	4.00 to 10.00	4.00 to 10.00
Mrs. Aaron Ward.....	4.00 to 10.00	3.00 to 8.00	4.00 to 6.00	4.00 to 6.00
Mrs. Chas. Russell.....	6.00 to 20.00	2.00 to 8.00	10.00 to 25.00	10.00 to 25.00
Mr. Geo. Sawyer.....	6.00 to 16.00	2.00 to 12.00	..... to .....	..... to
Columbia.....	6.00 to 20.00	2.00 to 8.00	10.00 to 25.00	10.00 to 25.00
Maryland.....	3.00 to 16.00	2.00 to 12.00	3.00 to 8.00	3.00 to 8.00
Ophelia.....	6.00 to 16.00	2.00 to 8.00	3.00 to 10.00	3.00 to 10.00
Adiantum.....	1.00 to 2.00	..... to	1.00 to 12.00	1.00 to 12.00
Asparagus plum (100 bchs).....	..... to .50	..... to .....	..... to .....	..... to
..... spren.....	..... to .50	..... to .....	..... to .....	..... to
Asters.....	1.00 to 2.00	1.00 to 2.00	2.00 to 4.00	2.00 to 4.00
Calendulas.....	2.00 to 4.00	..... to .....	..... to .....	..... to
Carnations.....	4.00 to 6.00	3.00 to 5.00	3.00 to 4.00	3.00 to 4.00
Chrysanthemums.....	.75 to 4.00	3.00 to 4.00	15.00 to 40.00	15.00 to 40.00
Ferns, Hardy.....	1.00 to 2.00	..... to	25.00 to 50.00	25.00 to 50.00
Galax leaves.....	..... to 2.00	..... to	10.00 to 12.50	10.00 to 12.50
Gladioli.....	4.00 to 8.00	4.00 to 8.00	..... to .....	..... to
Lillies Rubrum.....	6.00 to 8.00	..... to	6.00 to 8.00	6.00 to 8.00
Orchids Cattleyas.....	75.00 to 125.00	40 to 1.50	50.00 to 60.00	50.00 to 60.00
Orchids Cypripediums.....	..... to 1.00	..... to .....	..... to .....	..... to
Smilax.....	..... to .....	..... to .....	..... to .....	..... to
Sweet Peas.....	1.50 to 2.00	1.00 to 3.00	2.00 to 3.00	2.00 to 3.00
Snap Dragon.....	.75 to 1.00	..... to .....	..... to .....	..... to
Violets.....	.75 to 1.00	..... to .....	..... to .....	..... to

RAMBLING OBSERVATIONS OF A ROVING GARDENER

I notice that George Watson is singing the praises of the new dahlia Jean Kerr, for which the Burpee Company received a certificate of merit from the American Dahlia Society. It is not to be wondered at that this dahlia meets the approval of Mr. Watson and that it is interesting many florists who have seen it, either in the field or used as a cut flower. This dahlia, which is a seedling, is perhaps the best of the pure white novelties for cutting, that is to say, for florists use. Very likely it will come to be an important flower in the trade. That fact, however, will not interfere with its use in the garden and I am glad to recommend it to gardeners who grow dahlias. It is a well known fact that many of the flowers which make a handsome show when growing are almost useless for decorative purposes when taken into the house. Jean Kerr stands up well and loses none of its attractive features when combined with colored varieties. Moreover, it is an ideal flower for the amateur, because it seldom or never fails to produce a wealth of flowers, even in seasons when other varieties prove to be almost entire failures. It is said to be a fact that the aster beetle never touches Jean Kerr. I do not know personally about this peculiarity, but am assured that it is a fact. That being the case, Jean Kerr becomes a treasure, for the aster beetle is usually partial to white and light colored varieties.

Another new dahlia in which I have been much interested this season is Mandaiana, which is as the names indicates, a creation of W. A. Manda of South Orange, N. J. This dahlia is distinctive most particularly in its habit of growth. It is very dwarf and very stocky. The size of its stem is amazing and it can surely be expected to stand any kind of exposure without need of staking. The great value of this new dahlia is going to lie in its availability for landscape work. It should prove among the best for massing and for working out summer effects. This does not mean, though, that the blossoms are not suitable for cutting. They were used for decorating the tables at a recent meeting of the Horticultural Club of Boston, and proved very effective. The flowers are red and very large and because of

their stout stems hold up their heads with the utmost assurance. I believe that Mr. Manda has a very good thing in Mandaiana.

Growing in Professor Sargent's garden at Brookline I saw the other day an unusually fine clump of *Aconitum Wilsonii*, and was greatly pleased with the fine, deep blue shade of its blossoms. Certainly this is one of the best of the Monkshoods and a particularly fine perennial for fall flowering. This well established clump has made stalks almost as high as a man's head and Mr. Charles Sander, the head gardener, finds it very easy to handle. *Aconitum Wilsonii* is related to the old *A. napellus*. The leathery leaves are a dull green. The plant has a tuberous root stalk and likes pretty rich soil. Moreover, it needs

several years to get well established, but eventually it makes a very fine garden subject. It should become common, for it is easily raised from seeds and is fairly hardy.

THE HILLCREST FARM PRIZES

Boston, October 8, 1919.

Dear Sir:—The Hillcrest Farm special prizes offered at the exhibition of the Massachusetts Horticultural Society held September 25, have been awarded as follows:

First, \$50.00, to Edwin L. Lewis, Taunton. Second, \$30.00, to Faulkner Farm, Brookline; William N. Craig, superintendent. Third, \$20.00, to Edward A. Clark, Jamaica Plain, Walter H. Golby, gardener.

The prizes were awarded for exhibits of both fruits and vegetables winning the greatest number of points, based on the following scale: For single plates, four points for first prize, two points for second, and one point for third. For collections, for each variety, two points for first prize, one point for second, and one-half point for third.

WM. P. RICH, Secy.



The Dahlia Jean Kerr

THE GARDENER'S SECTION

MR. PEACOCK TALKS ABOUT DAHLIAS.

At a recent largely attended Dahlia Show in the Wanamaker Store at Philadelphia, a very interesting talk on dahlias was given by L. K. Peacock, who is engaged in the culture of dahlias at Fort Meyer, Fla.

The dahlia, he said, has more types, forms and color combinations than any other flower, and much of this variety is due to the hybridizing process whereby a mixture of "bloods" is made to save weak varieties of the flower from going to decay.

If one variety is beautiful, but weak and another being more rugged is less beautiful than the seeds of the two should be mixed. This will result in the strengthening of the former and will cause no loss of its beauty, he said.

The average life of a variety is from ten to twenty years. Some go into decay after three years and some live for more than fifty years. One variety, an A. D. Livona, created in 1840 by a Russian, is still in evidence and sturdy, he declared.

The method of propagation is simple, he said. At the end of the first year the plant is dug up and the roots, composed of five or six potato-like objects, disassembled. In this way when these "potatoes" are planted separately next spring, five or six plants are got from the one whose roots were dug up last fall.

John Wanamaker has taken a great interest in the work of Mr. Peacock and many of the varieties have been grown expressly for him, one being named after him.

TO MAKE WISTARIAS BLOOM.

Many gardeners will be interested in the following, which appears in the October number of Flower Lore, the little magazine written and published by Maurice Fuld.

Wistarias form one of the most interesting subjects from the standpoint of training a plant to do as you wish. Many people come to me, asking "Why is it that my wistaria now in the ground three years does not flower?" Or, "Why is it that my wistaria grows so luxuriantly, lots of foliage, and hardly any flower, and I often see them where there are simply covered with blossom?" The fact is, that the wistaria needs training in its early life, and it is possible, by proper prun-

ing, then, to make it bloom so free that the entire plant is covered with the blossoms. Of course, you all like to have your plants do that, and so I am glad to present you herewith a new thought and a new suggestion. Previously, in this magazine, I had explained how, by root pruning, one is able to absolutely produce flower buds after a certain period of time, but in addition to this, I want to suggest as follows: If you have planted a wistaria vine within the last four years or less and you find it grows luxuriantly, I want to give you a most radical recommendation. Go to your plant right now, as early in October as possible, and cut all the strong shoots back to four feet of their length; that does not mean to cut the entire plant back so that it will stand but four feet high, but I am referring to the heavy shoots which appear as branches from the main shoot. The thin shoots should be cut out entirely, for they are only detrimental; the cutting back will result that lots of new growth, but short growth, appears over this four foot cane, and as this growth cannot make much headway, it simply forms flower growth, or "spurs" as we call them professionally. Next year you will find that many more canes or side shoots will make their appearance, and again, next August or September, I want you to cut these side shoots back to a length to three or four feet, and after that you will have so many flower spurs that the plant will be a perfect bower of bloom in the spring-time.

THE ARBORETUM THEFTS.

New Haven, Conn., Oct. 10, 1919.

Dear Sir:—We learn through the columns of HORTICULTURE with deep regret that the Arnold Arboretum has been a victim of theft of some of its valuable plants.

It seems as though it must be the work of some thoughtless amateur as it is too incredible to believe that any horticulturist of mature experience could consider for a moment interfering in the slightest degree with the splendid work being done at the Arboretum. Even from a personal selfish point of view, not taking into consideration the ethical side of such a dastardly act, it would seem to the writer that the return of the plants taken can be reasonably anticipated if the horticultural press general will

make the necessary appeal through their columns. Surely the individual cannot possibly exist who would not gladly take advantage of an opportunity to return these plants once he appreciates the seriousness of his act, especially if some method can be devised by which his identity will remain unknown

E. F. COE,

FORMAL OPENING OF NEW GREENHOUSES

The new Central Display Greenhouse presented by Daniel Guggenheim and Murry Guggenheim at Public Conservatory Range No. 2 in the New York Botanical Garden on the eastern side of the grounds north of the Allerton avenue entrance will be opened on the afternoon of Saturday, November 8, 1919, from 3 until 5 o'clock and will be open to the public daily thereafter.

Brief addresses by Dr. W. Gilman Thompson, president of the Board of Managers, and by Dr. D. T. MacDougal, director of Botanical Research Carnegie Institution of Washington, will be delivered at 3.45 o'clock.

Motor-cars will meet the train leaving Grand Central Terminal at 2.35, due at Botanical Garden Station at 3.01.

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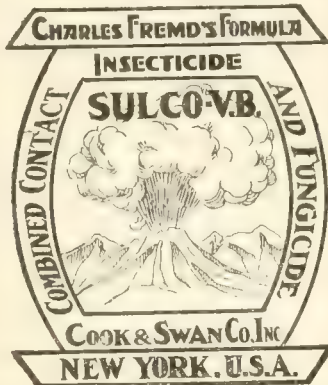
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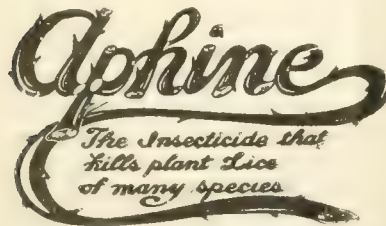
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½ Pint, 80c.; Pint, 50c.; Quart, 90c.; ¼ Gallon, \$1.50; Gallon, \$3.50; 5 Gallon Can, \$10.90; 10 Gallon Can, \$20.00. Directions on package.

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NEW ENGLAND.

James J. McManmon, of Lowell, is spending several months abroad, combining business and pleasure. He has been in England, Scotland and Ireland and his friends expect that he will have much to tell about when he returns, which will be in a few weeks.

Harvey B. Greene, of Lowell, has about 25,000 geranium cuttings and expects to do considerable wholesale selling locally. He also handles a good many ferns and chrysanthemums and reports a good business.

According to Morse & Beals, of Lowell, business has been better so far in October than it was before the war. Laforest Beals has been enjoying a trip through the mountains.

W. J. Collins, of Lowell, has been observing the 15th anniversary of the opening of his store and has been conducting a special plant sale, doing a very good business.

William G. Haynes, of Lowell, is building a new display house opposite the Edison cemetery. He has also been making other repairs on his present houses, including the putting in of cement foundations.

A. H. Wagland, of Lawrence, has a nice collection of plants which he is growing for sale in his own store. Being located in the same place as the Postal Telegraph Co. he ought to be well prepared for telegraph orders.

Campbell the Florist, of Lawrence, reports a large amount of funeral work. For that matter, so most of the other florists in Lawrence and vicinity.

Swan & Berndtson, of Lawrence, have some splendid looking houses, with everything about them exceedingly trim and neat. This firm has about 8,000 feet of glass.

Thornton Bros., of Lawrence, have done a big business in seeds this season and their large store is a busy place most of the time.

Karl S. Brackett, of Haverhill, has a store which impresses all visitors by its good taste and artistic arrangement. Mr. Brackett, who started in business about four years ago and is often to be seen in the Boston markets, has had a nice lot of wedding orders recently.

J. H. Playdon, of Andover, Mass., is canvassing the feasibility of organizing a florists' association for Lawrence, Andover and surrounding towns. The plan seems to be meeting with favor among the members of the trade, many of whom seem to appreciate the possibilities of such an organization.



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IVY, English, 3 in., \$8.00 per 100.

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HORTICULTURE

Vol. XXX

OCTOBER 25, 1919

No. 17

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This fern was

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Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

<i>NEPHROLEPIS:</i>	Each
Elegantissima, elegantissima compacta, and Muscosa, 3½-inch.....	\$0.35
Elegantissima and elegantissima compacta, 6-inch.....	.75
Muscosa, 5-inch.....	.75
Elegantissima and elegantissima compacta, 8-inch.....	2.00
Elegantissima and elegantissima compacta, 10-inch.....	4.00
Harrisii, 8-inch.....	3.00
Dwarf, Boston, 8-inch.....	2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown. N. Y.

FERNS

We have a splendid lot of pot grown Bostons and Scottii in 4 and 5-in. pots. Shipped without pots.

4-inch \$3.00 per dozen—\$20.00 per 100
5-inch \$4.80 per dozen—\$35.00 per 100

Cold weather is coming on fast and as all plants travel at consignee's risk this season, we advise early shipment.

Alyssum Giant Double, Heliotrope, Lantanas, Hardy English Ivy, Moonvines, Lobelia, Crystal Palace Gem, Coleus, standard sorts, for immediate shipment from 2-in. pots at \$2.75 per 100; \$25.00 per 1000.

Hardy English Ivy, strong, 3-in., \$3.75 per 100; \$35.00 per 1000.

Send for Catalogue Cash With Orders

R. Vincent, Jr., & Sons Co.

WHITE MARSH, MARYLAND

Henry H. Barrows FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTTY
CHRYSANTHEMUMS
MADISON, N. J.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

**CHRYSANTHEMUM
SPECIALISTS**
ELMER D. SMITH & CO.
ADRIAN, MICH.

Snow Queen Canna

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The **CONARD & SONS** WEST GROVE, PENN., U.S.A.

Robert Pyle, Pres. Antoine Winter, Vice-Pres.
We are subscribers to the Nurserymen's Fund for Market Development

ROBERT DYSART CERTIFIED PUBLIC ACCOUNTANT

Simple method of correct accounting especially adapted for florists' use.
BOOKS BALANCED AND ADJUSTED
40 STATE STREET . . BOSTON
Telephone Main 58

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 415, DUNDEE, ILL.

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

Flowers Under Glass

Cold storage should be relied upon up to the holidays for the supply of lily-of-the-valley pips for forcing. Choose Berlin pips for early and Hamburg for late forcing. The sand bed should have a bottom heat of at least 85 to 90 degrees. Several overhead sprayings during the day should be given until the bells are well formed, when spraying should be discontinued. For the first two weeks gently for about two days, afterwards all the shading can be removed. If grown in flats they may be placed in a cool part of the house, which will give the flowers a fine texture and more durability.

Don't run the sweet peas too high, which only leaves them weakened so that they do not easily recover. It is better during spells of rainy or misty weather to have a little heat and ventilation at the same time. Sweet peas like plenty of moisture at the roots, but they will not stand a continual over moist condition, so they should be allowed to dry out occasionally. Ventilation is an essential point in growing sweet peas. Keep a little heat running through the pipes now that the nights are cool, and at the same time open the ventilator a little at the top. This will give them the cool, dry atmosphere which is needed to prevent the dropping of the buds. Seed sown now in 4-inch pots will bring a crop in February which should last for about three months. Support them well from time to time. The most careful attention should be paid to watering as the days grow shorter.

Callas should be fumigated about once a week to keep them free from greenfly and thrips. Ventilation should be given on all favorable days. A temperature of from 55 to 60 degrees should be given at night in order that callas may bloom well. While flowering they require large quantities of plant food and should be given liquid manure regularly once a week, and when spring is nearing, twice a week. When heat becomes necessary use a sufficient amount of water on the paths and around the house for the prevention of a harsh dry atmosphere. Syringe the plants after the flowers have been cut on all good days. Trim away all old foliage, which will let more air and light to the rest of the plant. Callas will give good returns if grown under anything like fair treat-

JUST RECEIVED HOLLAND BULBS FREESIA PURITY 1/4 INCH UP

Prices on Application
J. M. THORBURN & CO.

53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON SPECIALIZE IN SEEDS

(personally selected strains)
WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

DUTCH BULBS PAPER WHITES JAPANESE LILIES

Write for prices
AMERICAN BULB CO.
172 N. Wabash Ave., Chicago, Ill.

Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY
SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL
Reselected Strains in Seeds.
Improved styles in Implements
Catalogue upon application.
16 So. Market Street
BOSTON, MASS.

LARGE GREENHOUSE BOILER FOR SALE

Fire Box Type, designed for Hot Water—No brickwork required—
Can be seen at the shop of

NEW ENGLAND IRON WORKS CO.
365 Summer St., Boston, Mass.

ment during the winter and spring.

Roman hyacinths should be allowed six weeks to come into flower and should have full light. They should be given sixty degrees at night. Paper-white narcissi should be brought in early and given more time to develop slowly in a light, sunny, cool house. Plants which seem a little forward may be kept at a standstill if given enough shade to exclude the sun and a temperature of forty degrees. Roman hyacinths may be kept back in the same way, although a higher temperature may be given them without harm. If paper-whites are brought into a warm house, they may grow all to leaves. Early in November bring in the flats and put them on the bench in the full light, in a house where it is about fifty degrees at night.

Now is a good time to start propagation of Begonias Lorraine and Cincinnati. Next year's stock must be obtained from early struck leaf cuttings. A good start and healthy root formation may be insured by a steady heat of seventy degrees in the sand with a few degrees overhead, a somewhat close and humid atmosphere, frequent sprinkling, and the exclusion of the bright sunshine by portable shades. Leaves which are well matured and of a healthy spotless green, are taken from the most vigorous plants in such a manner as to cause no disfigurement. The stubby end of the leaf should be cut away, which is all the trimming needed. Insert this lower end of the leaf in the sand so as to just bring the base in close contact with the surface of the sand bed. There is no doubt as to the superiority of early started plants from leaf cuttings over those propagated later by rooting side shoots in the usual way, though the latter have their uses and are probably as useful as anything expressly raised for a holiday trade.

SALEM, MASS.

Conant the Florist has a very interesting establishment, with about 7,000 feet of glass attached to the store. He grows much of his own material.

W. T. Walke of the Loring Ave. Conservatories has one house filled with cyclamens and they make a fine showing. He is also growing "mums" for market and has some fine looking stock.

The Harmony Grove Greenhouse, Geo. W. Creesy, Superintendent, has an establishment which is in the pink of condition. Indeed, a neater establishment is seldom seen. Mr. Creesy recently returned from the convention of Cemetery superintendents at Cincinnati.

MACAWI FERNS

A fresh lot of this fine new fern. They are in 2½-inch pots, are extra heavy and ready to be shifted into larger pots for Christmas sales and later.

Per 1000, \$200

Let us send you a sample 100 of this at the thousand rate and be convinced.

We can also do some not quite so heavy 2½ inch at \$18 per 100, \$150 per 1000.

BULBS: Clearing out now for the season. Send for our Bargain List.

CARNATION CUTTINGS for December and later delivery. There will be a shortage. We advise ordering early.

	100	1000
Ruth Baur	\$12.00	\$100.00
Ethel Fisher	14.00	115.00
Morning Glow	7.00	65.00
Laddie	10.00	90.00
Pink Delight	7.00	60.00
White Benora	7.00	65.00

Enchantress Supreme, Rose Pink Enchantress, Mrs. C. W. Ward, Merry Xmas., Rosalia, Aviator, Nebraska, Beacon, Crystal White, White Enchantress, White Wonder, Miss Theo, Belle Washburn.

\$6.00 per 100

\$50.00 per 1000

Marchless, Pink Enchantress, Alice, White Perfection

\$5.00 per 100

\$40.00 per 1000

PEONY CLUMPS

White, pink and red, averaging 15 to 20 eyes per clump \$50.00 per 100.

C. U. LIGGIT, Office 303 Bulletin Bldg. Philadelphia, Pa.

IBOLIUM The New Hybrid HARDY PRIVET (L. Ixora x Ovalifolium)

Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery.

The Elm City Nursery Co., WOODMONT NURSERIES, Inc., New Haven, Ct.

Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.

We are Headquarters for the BEST OF EVERYTHING
IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties
Thoroughly tested at our trial grounds, Raynes
Park, London, England. Send for Catalogue
CARTERS TESTED SEEDS, Inc. 166 Chamber of
Commerce Bldg. Boston, Mass.

IF in need of RELIABLE NURSERY STOCK
that is well grown, well dug and well packed
Send to the **BAY STATE NURSERIES**
Wholesale and Retail NORTH ABINGTON, MASS.

NOT TOO EARLY TO Buy Christmas Stock Now

Get your stock before the other fellow picks all the best. Finish the plants in your own houses and save disappointment later on from express delays, damaged plants and unfilled orders.

Stock listed below is all of best quality. Grown by experts and packed carefully

Extra heavy ADIANTUM HYBRIDUM,
6 in., \$45.00 per 100

Extra good CHATELAINE BEGONIA,
2½ in., \$7.00 per 100, \$65.00 per 1000.
3-in., \$12.00 per 100.

CALENDULA Orange King, the O. K.
strain. The result from a number of
years of greenhouse selecting. If you
want the best let us supply you. \$5.00
per 100, \$45.00 per 1000.

BIRD'S NEST FERN. Excellent stock,
2¼ in., \$18.00 per 100; 3-in., \$27.50 per
100.

FERNS

Nephrolepis, Verona, Dwarf Boston,
Scottii, Elegantissima, Teddy Jr.,
Roosevelt

POT-GROWN 100
2½ in. \$12.50
4 in. 50.00

BENCH BOSTONS

Ready for 4-in. pots, \$50.00 per 100.

PTERIS Wimsettii and Victoria, 3-
in., \$16.00 per 100.

PTERIS Rivertoniana, 3 in., \$20.00
per 100.

The above are especially fine—
ready for 4-in. pots.

FERNS for fern dishes, As- 100 1000
sortment of best sorts.
2¼ in. \$6.00 \$55.00
3 in. 12.00

KENTIA Belmoreana, Strong Doz. 100
2¼ in. \$1.50 \$12.00
3 in., \$25.00 per 100, 4 in., 50c. each

IVY, English, 3-in., \$8.00 per 100.

CINERARIA, selected strain, 2½ in.,
\$7.00 per 100, \$65.00 per 1000.

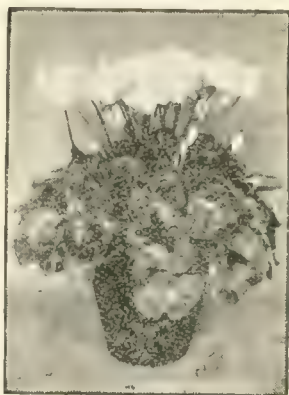
WINTER FLOWERING FORGET-ME-
NOT. Best Boston Market Forcing
Strain. \$7.00 per 100, \$65.00 per 1000.

SNAPDRAGON. Ready now. Nelrose,
Silver Pink, Enchantress, Keystone,
Phelps White and Yellow, 2½ in.,
\$6.00 per 100, \$55.00 per 1000

BEGONIA MRS. M. A. PATTEN. Dark
sport of Chataleine. Buy now and
have them ready for Xmas 2½ in.,
\$10.00 per 100.

Boston Yellow Marguerite

True Stock, 2½ in., \$10.00 per 100,
6 in. at 55c. each.



CYCLAMEN

Blood Red, Salmon, Crimson,
White, carmine eye. 4 in., 50c.;
5 in., extra fine, \$1.35.

BEGONIA

MELIOR and CINCINNATI

Very fine, 5 in. at \$1.35; 4 in.,
ready for 5 in. at 70c. Can ship at
once; nice 2½ in. at \$25 per 100.

SIM'S POLYANTHUS

Two New Ferns

Nephrolepis Macawaii

A Winner

2½ in., \$20 per 100.

The Victory Fern

(Nephrolepis Victoria)

Bronze Medal at Detroit.

	Per Doz.	Per 100
2½ in. pots.....	\$3.00	\$20.00
3½ in. pots.....	7.50	20.00

OTAEITE ORANGES, for growing on,
2¼ in., \$20.00 per 100.

LATANIA Borbonica, Fan Leaf Palm,
3 in., \$30.00 per 100.

ARICA Lutescens, 2½ in., single plants,
\$15.00 per 100, 2½ in., made up three
plants to the pot, \$20.00 per 100.

ASPARAGUS Plumosus, seed	100	1000
100s	88.00	
2½ in.	85.00	15.00
3 in.	10.00	
Sprengeri Seedlings	7.00	
Sprengeri, 2½ in.	5.00	15.00
3 in.	10.00	

CHRISTMAS JOY PEPPER. Heavy,
4½ in. pots, \$30.00 per 100. Well set
with Berries and colored. A Bargain

Asparagus Plumosus Seed

Massachusetts greenhouse grown,
1600 \$3.00; 5000 \$13.50

Coeleus Trailing Queen

Fine for mixed pan, basket and
hamper work. 2½ in., \$6.50 per 100,
\$60.00 per 1000

Crotons

Nice 2½ in. plants. Get your stock
now and be ready for your mixed pans
and hampers for the holidays. A good
assortment of highly colored sorts both
broad and narrow leaf types. \$35.00
per 100.

Dracaenas

Godsefiana, Sanderiana, Lord Wolse-
ley, Kelleriana and Terminalis. They
are highly colored and just right for
mixed pans and hampers for the holi-
days. You will save money by getting
them now. Strong, 2½ in. pot plants,
\$25.00 per 100; 3 in., select stock, \$40.00
per 100.

Gypsophila Seed

(Nicholson's Forcing Strain)

Earliest and Best

¼ oz., \$50c.; ½ oz., \$8c.; 1 oz., \$1.50

Giganteum Lilies

We still can supply ALL SIZES.

Let us quote you RIGHT PRICES
on best quality and amount you
want.

Cash or satisfactory trade references. No C. O. D. Shipments.

L. J. REUTER CO. Plant Brokers 329 Waverly Oaks Road
WALTHAM, MASS.

HORTICULTURE

Vol. XXX

OCTOBER 25, 1919

No. 17

THE TALK OF THE TRADE

The various strikes in New York, particularly those of the longshoremen and express handlers, has brought about a complication in the delivery of bulbs, causing hardship to importers, seed houses and the average buyer. So many of the trade in other parts of the country do not realize the desperate conditions in New York that I want to mention this trouble with a plea for patience. It is not the fault of the firm from whom you buy bulbs if you do not get the delivery you expected; they are helpless. The situation is clearing at this writing and we have reason to hope for better deliveries without delay.

I was agreeably impressed with the quantity and excellent quality of ferns in the Flatbush establishments. The different varieties of *Nephrolepis* are largely grown, and while there is a general scarcity of stock in 4's, 5's and 6's in various parts of the country, these Flatbush growers seem to have prepared themselves for an excellent call from November 1st on. Henry A. Wagner and John Scott in particular have these ferns in quantity and in excellent condition. Mr. Scott also has a fine lot of *Dracaena terminalis*, *Massangeana* and *Fragrans*, well grown and in marketable sizes, while at the greenhouses of Louis Schmutz, Jr., I was pleased to see a fine lot of *Araucarias*, something we have found difficult to locate.

A variety of chrysanthemums shipped to New York which is very popular and particularly well done is McNiece. It may be necessary to stretch the imagination a little, but I think it resembles Vivian Morrell. It is a deep rose pink with quilled petals, nicely formed and evidently produces an even grade of flowers.

The individual flower of Rose Frank W. Dunlop shows up nicely. The form and general character of this rose to those who saw it at Buffalo, were particularly impressed with it. The strong features of size, color and keeping qualities were nicely brought out and it attracted the eye of everyone who

came within range of the meeting hall. It carries a number of points resembling Russell, particularly in respect to color, size and stem. The keeping qualities are evidently of the best and nothing that we can see up to this time should stand in the way of this rose becoming a good commercial variety. The introducers' description is as follows:

Frank W. Dunlop, a seedling from Russell, which is a great improvement on that variety in all respects and particularly in its quick free growth and freedom from spot. The color is somewhat on the shade of Russell but altogether more brilliant. The form of the flower is ideal and no rose we know of shows such character as does Dunlop. The flower is very large, larger than Russell from wood of equal strength. There are no malformed buds; even the strongest shoots produce perfect flowers. The flowers average about forty-five petals but the shape is such that the flower opens freely in dark weather. Perhaps the

strongest point of Dunlop is its keeping and shipping qualities. In this respect it is unsurpassed, as flowers shipped from Canada to New York kept in splendid condition for nine days afterwards. We endorse Dunlop fully in every respect and in our opinion it is the best dark pink rose on the market.

THE MARKET.

It is a case of too much "mum" this week. These flowers have come in so fast that they have made everything sag. In Boston there seems to be a noticeable increase in the number of pom pons, which are being used extensively in made up pieces. This is a tendency which has been marked in New York and other places for some time. Pom pons have been very free in New York, but have sold well. Still, the influx of chrysanthemums in all the leading markets has proved a little demoralizing. The first Bonnaffons appeared in the Boston market this week, coming from William Nicholson of Framingham and were splendid specimens



The New Rose, Frank W. Dunlop

HORTICULTURE

Established by William J. Stewart in 1904

VOL. XXX

OCTOBER 25, 1919

NO. 17

PUBLISHED WEEKLY BY
HORTICULTURE PUBLISHING COMPANY
 78 Devonshire Street, Boston, Mass.

EDWARD I. FARRINGTON, Editor.

Telephone Fort Hill 3694

ADVERTISING RATES:

Per inch, 30 inches to page..... \$1.35

Discount on Contracts for consecutive insertions, as follows:

One month (4 times), 5 per cent.; three months (12 times), 10 per cent.; six months (24 times), 20 per cent.; one year (52 times), 30 per cent.

Page and half page space, not consecutive, rates on application.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

Editorial advertising

The John Wanamaker editorials which appear daily the year 'round with his advertising are not only good advertising but good literature as well. The one reproduced herewith (reduced one-half from the original) is a philosophical gem and a poem in prose. Coming from the young heart of a man in his eighties full of years, honors and wealth—and still on his job every day, lively as a bee among the clover blossoms—it is worthy of preservation in the scrap books of all who love the fragrance of sweet thoughts and the wisdom of the sages.

Here is the editorial in question:

A ROOM WHICH FLOWERS HAVE MADE SWEET

is sweet long after the flowers are gone.

The sky glows long after the sun disappears.

There are people who visit us that make us feel happier and richer and leave us lonelier and poorer when they go away.

Few of us understand each other. Little some people know how dependent we are on something outside of ourselves. Often a single word or look would have changed an entire day.

So many of us stand before each other only as closed books—contents unknown.

All the summer long we knew when we came near the sweetness of the odorous honeysuckle along the back road or the scent of the magnolia and the smell of the lemon trefolia bushes.

Even an old-fashioned shrub bush gives out of its sweet self to all comers who pass by it.

We aim to make our homes and our Store and our ways of doing business a pleasure to people.

(Signed) JOHN WANAMAKER.

Oct. 16, 1919.

Profit sharing

We were very much impressed with the very frank statements made at the Buffalo convention by Mr. Herman P. Knoble, of Knoble Bros., Cleveland, Ohio, regarding the profit-sharing plan which they have inaugurated with their employees. Those of the older employees and those in charge of departments are paid ten per cent. of the net profits, the fiscal year starting July 1st, this date being selected as the best for the working out of such

a system. This is a move in the right direction, and shows the florist industry to be keeping up with the trend of the times. The labor troubles which one and all are called upon to fight, can best be combatted by good wages, reasonable hours and fair treatment in every way.

Help and wages

The question of help in the greenhouse is becoming more acute. Some people seemed to think a while back that the return of the service men would solve the problem. This has not proved the fact. Many service men have gone back to their old jobs, it is true, but not in the old spirit. In some cases their wages have been doubled, but they also demand shorter hours and little or no Sunday work. How far they have a right to go in their demands, who can say? The fact remains that it is impossible to get as much work done with the same money as formerly, although the cost is much greater.

Where is new labor to come from? That it is not coming from England or Scotland or Holland is reasonably certain. Can it be found in the agricultural colleges? Not to any great extent. The college men specializing in floriculture are few. None of the ex-service men who have taken advantage of the courses offered at Amherst, Mass., have elected this branch. Of the regular students who take up green houses work, but few stick to it. All of them say that the wages are too low.

On the other hand, many commercial growers do not like to employ college graduates, saying that these young men place too high a value on their services. So there you are. The business needs hundreds of young men from the shops and the factories who are willing to learn the trade from the ground up and learn it in a commercial way. But the financial inducements are too small. Anyway you look at it, the wages of green houses men must be made attractive if the work is to be done, and flowers must sell for enough to justify these wages. As President Cleveland said, we have to deal with a condition and not a theory.

Bill boards

We had expected to find the editorial desk littered with replies to Mr. J. Horace McFarland's letter about bill board advertising when we sat down in front of it on Monday morning. The letters were not there. Perhaps the contents of Mr. McFarland's epistle had not been fully digested. We want it thoroughly understood that HORTICULTURE is not taking sides on this issue. The paper is an open forum. Any proper communication which is submitted to it will be published. Is there any better way to get at the truth of any matter than through frank and free discussion.

There can be no question of the fact that this matter of advertising by street signs has taken a decided hold upon florists in many parts of the country. Evidence that this is so is to be found in the placing of fifty orders at the Buffalo convention. Money talks and florists are spending money for projects in which they do not believe.

Mr. McFarland has presented a long list of arguments in opposition to bill board advertising. His position is well known and he has been perfectly consistent. Now for the benefit of the trade in general and for all members of the trade in particular who have been impressed with the possibilities of this form of advertising, let the other side be given. There is no better way to get this question fairly before the florists of the country than by the printed word. The columns of HORTICULTURE are open. We ask your co-operation, gentlemen, for the good of the trade.

THE GOULD BILL.

A Measure of Great Importance to Nurserymen.

The following very important circular is being sent members of the American Association of Nurserymen:

Your attention is asked to the Gould Bill, H. R. No. 5939. It is short; here it is:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture be, and is hereby, authorized to assemble, grow, and test plant material deemed desirable or suitable for use in propagating fruit, nut, and ornamental trees and other plants, for the purpose of determining stocks better adapted to the climatic soil and other conditions under which fruit nut and ornamental plants are grown.

To establish and maintain mother orchards or plantations for the purpose of providing domestic sources of seeds, cuttings, or other propagating material in order that the future of the American fruit, nut and ornamental plant interests may be insured and placed under domestic control, dependence for such stocks now being largely on foreign sources.

To investigate methods of growing stocks, study methods of propagation and to encourage the propagation of fruit, nut, and ornamental trees and other plants in this country.

Sec. 2. That there be, and is hereby, appropriated out of any moneys in the Treasury not otherwise appropriated, the sum of \$30,000 for the purpose of carrying into effect the objects of this Act, including the rental of lands, the purchase of equipment and supplies, the payment of rent, and the employment of such person or persons and means in the District of Columbia and elsewhere as the Secretary of Agriculture may deem necessary.

The bill provides for tests and experiments to provide suitable and adequate supplies for home-grown seeds, seedlings and stocks for propagating purposes.

Most things formerly imported are now excluded. Many of those things can be and are being propagated here now. Other and needed things are not being grown here and their production in suitable quality and in adequate supply has to be undertaken by way of experiment and therefore at expense, and it is doubtful if individual effort can be depended on for experiments of doubtful results and uncertain returns.

And there are some other things still permitted entry, like fruit-tree seedlings and rose stocks, whose future supply is uncertain for two rea-

sons: the possible further action of the Federal Horticultural Board and the attitude of the foreign growers. It is not to be imagined that the Federal Horticultural Board may act hastily or arbitrarily, but the inclusion of stocks now permitted entry with those excluded, would be logical and may possibly be considered necessary at some future date.

At the International Horticultural Trades Conference, held in Paris last month, the matter of our prohibition order was considered and while no official action was taken, according to the published reports, still, we can conclude from facts and circumstances known, that American buyers will not get any stocks that can be sold to nurserymen elsewhere.

We are embarrassed by our dependence on other countries for our seeds from which to grow fruit-tree seedlings. In the event of over-supply, we can buy seeds abroad, but we can safely assume that they will be available to us only after all other buyers have been supplied. In short, we are answered, in effect, that inasmuch as we refuse to permit other countries to sell us their ornamental stocks, they feel relieved of obligation to let us buy their fruit-tree stocks, until, of course, they have supplied all other markets open to them.

The conclusions as to what we may expect, may be wrong. They are drawn from facts open to all of you and you can decide if, in view of the present and probable future supplies of foreign seedlings available to you, it may not be wise to provide for home production of our raw materials.

If the members of the Association should be practically unanimous in asking for the passage of the Gould Bill, we can probably secure favorable action.

If you favor the bill, will you write to your congressman? Also to Hon. Norman J. Gould, M. C., who introduced the bill, and to Hon. Gilbert N. Haugen, Chairman, House Committee on Agriculture, Washington, D. C. I

ALL IMPORTED BULBS

DUTCH—FRENCH—JAPANESE

AT TRADE PRICES

Keep your Counter Display Alive

Nothing Better than Bulbs and None Better than Ours

Moderate cost. Big Profits. No Loss

Tulips, Hyacinths, Narcissus

Finest in Cultivation

Write for "Book for Florists"

43 Barclay St.
New York City
Vaughan's Seed Store
33 W. Randolph St.
Chicago, Ill.

shall be glad if you will write me also that, as your Secretary, I may intelligently represent your views and wishes. A hearing before the committee having the bill under consideration, will be held very soon and opportunity has been offered the association to be heard. Will you give this important matter the prompt attention that its urgency requires?

The bill affects the nurserymen immediately, but in a much larger way, it affects the vast orchard interests of the country. I therefore urge each of you to bring it to the attention of your friends who may be prominent in local and state horticultural societies, fruit-growing associations and other bodies whose interests are affected.

Yours very truly,

JOHN WATSON,
Executive Secretary.

Princeton, New Jersey,
October 15, 1919.

F. T. D. CONVENTION NOTES.

The judges of the window displays of the retail florists of Buffalo awarded first prize to S. A. Anderson; 2d, W. J. Palmer & Son; 3d, William Scott Co.

Besides the beautiful vase of Rose Frank W. Dunlop, the varieties Cornelia and Madam Butterfly were shown. Madam Butterfly is a sport of Ophelia, highly colored and very attractive. Cornelia is a seedling from Mrs. Aaron Ward and Ophelia, medium sized flowers of salmon pink.

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

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How often in the past have we heard of men who said they did not join the S. A. F. or local florist club because they had no time to attend meetings or seemingly appeared not interested. This answer might go if it were an association not connected with a man's own occupation or profession but when given by men as an excuse for not joining organizations for betterment of his own business, it shows the highest type of slackerism.

To allow a few men who have the same interest as their neighbor to shoulder all responsibilities surely, is not right unless they have the backing of the many to encourage them. And then, to participate in the benefits that come afterwards without indulging in the expense now and then, is another point of slackerism and selfishness.

The S. A. F. should have the backing of every man in the profession for the way it gets behind every movement that tends to help the business generally, and the men who do not join have still the benefits given by the Society with the knowledge that they are not supporting it. Does it pay to stay out? The old time sage asked "If I am not for myself, who will be; but if I am only for myself, what am I?"

Doesn't this argument convince those who still hesitate about joining and contributing to the various activities connected with flowers? And if so, we need you and you need us.

Arnold Bennett, once said, "You will never have a better chance than you have at present. You may think you will have but you are mistaken."

Doesn't this strike home to those who are hesitating about joining? Go to it now and there will be a return many-fold by the way of better understanding and good-will toward those with whom you come in contact.

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Horticultural Sundries

66 W. 23rd St., NEW YORK

AUTUMN COLORS IN THE ARNOLD ARBORETUM

This is a good time to visit the Arnold Arboretum. The unusually mild winter and the abundant summer and autumn rains have been favorable to most plants, and probably the Arboretum has never looked better at this season of the year. Conifers, particularly Junipers, have not before been in better condition, and the fresh green of the leaves on many trees and shrubs is unusual in the middle of October and heightens the beauty of the autumn colors of the leaves of those plants which change color early under all conditions.

There can be few places in the world where colors of ripening leaves are so varied or are continued through so many weeks. For the leaves of the plants of eastern Asia, which are well represented in the Arboretum, usually are beautifully colored after those of our eastern American trees, with the exception of the Oaks, have fallen. A few conspicuous exceptions to this general rule are worth noting:— Nearly three weeks ago and before the leaves of the Red Maple (*Acer rubrum*) had begun to change color, those of the Cork-barked tree of eastern Siberia (*Phellodendron amurense*) were bright gold color, making the two trees on the right-hand side of the Meadow Road the most brilliant objects in the Arboretum. These trees have now been bare of leaves for several days. They are still interesting objects, however, for now that the leaves have gone it is possible to see clearly the pale, deeply furrowed soft corky bark of the trunk and large branches to which this tree owes its name. The genus *Phellodendron* is confined to eastern Asia, and the five species now known are well established in the Arboretum. On account of this bark *Phellodendron amurense*, the type of the genus, is perhaps the most interesting species. The others, however, are large and more shapely trees, and the species of northern Japan and Saghalien (*P. sachalinense*) is well suited for street planting. The pungent oil which abounds in the leaves of these trees protects them from the attacks of leaf-eating insects.

Another conspicuous exception to the rule that the leaves of Asiatic plants change color later in the autumn than those of eastern American plants is found in the Burning

Bush with winged branches, *Evonymus alatus*, a native of Japan and Korea. The flowers and fruits of this plant are small and inconspicuous, but few plants surpass it in the beauty of its rose-colored autumn foliage which is unlike that of any other plant in the Arboretum. This plant, if it gets the opportunity, will spread into a shrub from ten to fifteen feet across with lower branches laying close to the ground, and will form a compact round-topped head. It is a plant, however, which unless it can have plenty of room in which to grow is not worth a place in the garden.

Acer ginnala is another Asiatic plant which takes on its autumn colors early. This small maple, which is a native of eastern Siberia, Manchuria, and Korea, is not surpassed in autumn brilliancy by any American Scarlet Maple. One of the early introductions of the Arboretum it has been taken up by some American nurserymen and is now sometimes found in northern gardens. A blue and a brown dye are obtained from the leaves, which are shipped in quantity from Korea to China. As this little maple is very hardy, and grows rapidly and produces large crops of seeds it might have been advantageously planted commercially in the northern states had not vegetable dyes been so generally superseded by synthetic dyes, a product of coal tar; and it is probable that these maple leaves may not be much longer used in China, which is already receiving considerable quantities of blue dye manufactured in the United States.

Another Korean and Manchurian maple, *Acer mandshuricum*, also illustrates the fact that the leaves of some Asiatic trees turn color and fall early in the season. This is one of the group of maples with leaves composed of three leaflets and one of the largest and handsomest trees of Manchuria and northern Korea. Like those of a few other plants, notably the Japanese *Acer nikoense*, the leaflets of this maple retain in autumn the pale color of their lower surface which increases the beauty of the bright red upper surface. Seedlings of this maple have grown rapidly in the Arboretum and have flowered and produced infertile seeds for the last two or three years. The plants are hardy; some of them, however, have died, and the fact that small individuals only a few years old have flowered indicates that there is something in the climate or soil of Massachusetts which does not suit them. This is unfortunate for *Acer mandshuricum*, from which much has been expected here, is a tree of great beauty and interest.

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Dear Sir:

In the explanation (HB-105) of Regulation 14 of the regulations as amended under Quarantine 37 it is stated that "In exceptional cases the importation of novelties (i. e. new varieties) may be made for personal use but not for sale." This is intended to provide for the importation of such new varieties by directors of botanical gardens, collectors, and growers of special collections of plants of recognized standing, but was not intended to apply to importations which may be desired for personal use other than as indicated or for the adornment of private estates. In case such public gardens, collectors, or growers of special collections are not known to the experts of this department, they may be required to furnish evidence of their status.

Yours very truly,

C. L. MARLATT.

Chairman of Federal Horticulture Board

SPRINGFIELD, MASS.

The Flower Shop on State street was recently opened by Mary J. Tierney, who states that she is doing very well indeed. While small, the store, which is in the Hotel Victoria Building, is attractive and has a good location.

George Johannes has been cutting some excellent chrysanthemums, with which he is supplying the local trade.

BOSTON.

Miss Anna F. Gray, daughter of M. F. Gray, a prominent florist of Milton, was recently married to Richard F. Chamberlain, also of Milton.

Walter K. Pederson of St. John is in Boston on a combined business and pleasure trip. Owing to the shortage of coal and the help question, Mr. Pederson is to close down all but one small green house this winter and buy most of his stock.

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"Oh, send your thanks by Poky. Or you might say it with flowers, Stum, as the florists' association puts it." This is a sentence taken from a story in *The Saturday Evening Post*. (See page 130, issue of October 11.

Mr. Robert Pyle, president of the Conard & Jones Co., West Grove, Pa., writes on October 18th: "My dear Mr. Young: Evidence that you are putting your campaign across looms up in two Philadelphia papers this a. m.—the *North American* and *The Inquirer* contained the enclosed references to "Say it with Flowers." I congratulate you." The clippings were as follows:

"Following the advice of a well-known ad. in the case of all ceditonists, I. W. W.'s, Reds, radicals, refuse, Russian Bolsheviks and roughnecks, we'd like to 'Say it with Flowers.'"

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If a florist is loyal to his business, would like to see it expand, and would have flowers considered as a necessity rather than a luxury in every home, it is his bounden duty to support this Campaign which, more than anything else, is working toward these ideals.

If you have not already subscribed, lose no time in sending in your subscription. Remember, you are giving nothing, you are investing with the prospect of sure returns on your investments.

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NEWS AND COMMENTS

NEWPORT HORTICULTURAL SOCIETY

The Newport Horticultural Society has recently held its twentieth annual ball, the proceeds of which are to be used in giving a series of free lectures on horticultural subjects during the coming winter. The Society has just donated \$50.00 of its funds toward the proposed greenhouse at the State Tuberculosis Hospital at Wallum Lake and is circulating a paper for individual subscriptions among its members.

At the Fall Show and at recent meetings the following rewards have been made: To James Robertson, gardener on the Mrs. T. O. Richardson estate, a silver medal for a dahlia, a seedling of "Geisha;" to C. M. Bogholt, gardener for Miss Fanny Foster, a silver medal for a seedling gladiolus, "Miss Fanny Foster," pure white; and bronze medals for "Miss Anna Bogholt," a lemon seedling gladiolus, and "Mrs. Gen. Rice, a pink seedling; to Fred P. Webber, a first class certificate for collarette dahlia "Magnetic" and his duplex "Rosso," and certificates of merit for his collarettes, "Cpl. Edw. Drury," "Eden" and "Autumn Tints."

NASSAU COUNTY HORTICULTURAL SOCIETY.

The regular monthly meeting of the above society was held in Pembroke Hall, Glen Cove, on Wednesday, Oct. 8th, at 7.30 p. m., President Joseph Adler presiding. Jas. Waite, Robt. Marshall, Angeloni Carmine and G. W. Anderson were elected to active membership. The judges appointed for the monthly exhibits were Messrs. Jas. McDonald, Geo. Ashworth and Alex. Sherriffs, Thos. Henderson was awarded 1st prize for a beautiful vase of paeony flowered dahlias. It was announced that all arrangements had been made to hold our fifteenth annual chrysanthemum show on Thursday and Friday, which can be had on application. Quite a discussion was caused among the members as to what constitutes an annual, some claiming that year is an annual, while others that an annual must flower and die down and be impossible to carry over another year. It would be interesting to hear from other societies their views on this subject. After the meeting a welcome home party was held in honor of our boys who gave their

services in the world war. It was thoroughly enjoyed by all. Wednesday, Nov. 12th, is to be Chrysanthemum Night of the Society. The competition will be for three white, three pink, and three yellow in "mums."

HARRY GOODBAND, Cor. Secy.

WORCESTER.

Sargent the Florist has had his share of the wedding decorations this fall, the last one very unique, combining as it did with the autumn leaves and flowers a variety of seasonable birds, including bluejays, black-birds and yellow hammers.

Archibald Dallachie, a veteran florist, while picking apples, fell twenty feet by the breaking of a limb and sustained a severe scalp wound and concussion of the brain. He was rushed to the hospital and is reported to be resting comfortably.

Mr. A. S. Winter & Son, of Sunny-side greenhouses, appeared on the street this week with a beautiful new panel top delivery car. They have the best wishes of the trade.

ROCHESTER, N. Y.

E. P. Wilson, George Kramer, Geo. T. Boucher and Wm. Keller attended

the Florists' Telegraphic Convention, held in Buffalo, last week.

Edwin Kendig, who occupied The Rosary Flower Store, has closed the store and is shipping the entire fixtures to Oswego, N. Y.

The store and greenhouse employes and friends of Geo. T. Boucher will be entertained at a pig roast Oct. 21.

Hugo Teute is growing some very good begonia and cyclamen plants.

H. E. Wilson is cutting some good Chrysolora and Golden Glow 'mums.

THE HORTICULTURAL SOCIETY OF NEW YORK.

Do not forget the fall exhibition of this society which will be held October 30 to November 2 at the American Museum of Natural History. All, whether members of the society or not, are invited to make exhibits. Schedules can be had by addressing the secretary, George V. Nash, New York Botanical Garden, Bronx Park, N. Y. City.

Please make your entries early, so that adequate arrangements may be made for the proper presentation of the exhibits. You will confer a great favor upon the management by an early entry.

GEORGE V. NASH, Secy.

DREER'S "Riverton Special" Plant Tubs



No.	Diam.	Ea.	Doz.	100.
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton Tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER, Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.



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PECKY CYPRESS STOCK

HOT BED SASH

Ask for Circular D and Prices

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THE BOILER OF Unequalled Fuel Economy

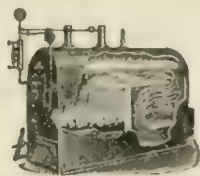
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

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(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



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3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

CHRYSANTHEMUM SOCIETY OF AMERICA.

Report of New Chrysanthemums submitted to the Committee appointed by the Chrysanthemum Society of America.

Exhibited by Elmer D. Smith & Co., Adrian, Mich., at Chicago. Smith's Sublime, Jap. inc., light pink, commercial scale, 91 points.

Exhibited by Elmer D. Smith & Co., Adrian, Mich., at Cincinnati, Smith's Sublime, commercial scale, 89 points.

CHAS. W. JOHNSON, Secy.

HORTICULTURAL SOCIETY OFFICERS NOMINATED

The nominating committee of the Massachusetts Horticultural Society announces the following list of nominations for the various offices of the Society for the year 1920:

President, William C. Endicott; vice-president, Charles S. Sargent; trustees for three years, Albert C. Burrage, Ernest B. Dane, Edwin S. Webster, Fred A. Wilson; trustees for two years, Arthur H. Fewkes; nominating committee, Oakes Ames, William Anderson, John K. M. L. Farquhar, Samuel J. Goddard, John E. Thayer.

In accordance with the by-laws of the Society two weeks are allowed for further nominations by the membership should any be desired.

The annual meeting of the Society for the transaction of business and election of officers will be held at Horticultural Hall on Saturday, November 15, at twelve o'clock.

WM. P. RICH, Secy.
Boston, Oct. 17, 1919.

GARDENERS' & FLORISTS CLUB OF BOSTON

There was a large attendance at the meeting Tuesday evening, October 21st, 120 members being present, including a number of ladies.

The changes in the by-laws voted on at this meeting were all accepted with one exception.

It was voted to send \$25 to the Committee on Public Safety of Boston who are caring for the State Guard, and letters supporting Governor Coolidge and Police Commissioner Curtis in the police strike were ordered sent.

Prof. J. G. Jack of the Arnold Arboretum gave a lecture on native shrubs, trees, fruits and flowers, also some western plants, illustrated with 85 stereopticon views. The lecture was listened to with close attention, and at the close Mr. Jack answered many questions.

The exhibits were numerous, covering two large tables, and awards were made as follows:

Standard Pelargonium Ricard and Cosmos Lady Lenox—Walter H. Golby, vote of thanks.

Plate of Beurre Bosc Pears—H. T. Schafer, honorable mention.

Collection of Apples, Pears and Quinces—H. H. Rogers, honorable mention.

Solanum Cleveland, very heavily fruited—W. H. Golby, honorable mention.

Cattleya Mantini, a fine new hybrid Orchid—W. H. Golby, award of merit.

Specimen Blooms of Chrysanthemums Mrs. Gilson and Mrs. Mitchell—W. H. Golby, vote of thanks.

Specimen Blooms of new yellow Chrysanthemum Nagirooc—W. H. Golby, report of merit.

Large collection of Apples, Pears and Crabapples—W. N. Craig, honorable mention.

Tomato Carter's Sunrise—W. N. Craig, vote of thanks.

Bean Sutton's Plentiful, greenhouse grown—W. N. Craig, honorable mention.

Parsley Dobbie's Selected—W. N. Craig, vote of thanks.

Collection of Apples, Pears and Quinces—W. H. Golby, honorable mention.

Lettuce May King and Big Boston—W. H. Golby, honorable mention.

Carnation Ethel Fisher, formerly Red Cross—Peter Fisher, vote of thanks. This variety has already received many high awards from the club.

Laelio-Cattleya Serbia—L. B. Towle, report of merit.

Laelio-Cattleya Canhaniana Rex—L. B. Towle, honorable mention.

Large vase of Chrysanthemums Early Snow and Robert Halliday—Fred E. Palmer, vote of thanks.

Specimen plants of Begonia Rex—Wollrath & Sons, vote of thanks.

Magnificent specimen plants of Cyclamen—Wollrath & Sons, report of merit. Wollrath & Sons reported at the meeting that they had sold two dozen of these plants at \$17.50 per plant.

It was announced that nomination of officers for the ensuing year would take place at the November meeting.

WHOLESALE FLOWER MARKETS—TRADE PRICES—Per 100 TO DEALERS ONLY

	BOSTON Oct. 20		NEW YORK Oct. 20		PHILA. Oct. 20		CINC. Oct. 20	
Roses								
Am. Beauty	8.00	to 40.00	2.00	to 40.00	15.00	to 50.00	10.00	to 25.00
Hadley	3.00	to 20.00	4.00	to 20.00	8.00	to 15.00	8.00	to 21.00
Hoosier Beauty	5.00	to 20.00	..	to ..	4.00	to 10.00	5.00	to 10.00
Killarney	2.00	to 16.00	1.00	to 5.00	4.00	to 10.00	5.00	to 10.00
White Killarney	4.00	to 20.00	2.00	to 5.00	4.00	to 10.00	5.00	to 10.00
Mrs. Aaron Ward	4.00	to 12.00	3.00	to 6.00	4.00	to 6.00	5.00	to 8.00
Mrs. Chas. Russell	5.00	to 20.00	2.00	to 15.00	10.00	to 25.00	8.00	to 15.00
Mr. Geo. Sawyer	3.00	to 12.00	1.00	to 4.00	..	to ..	8.00	to 15.00
Columbia	3.00	to 12.00	2.00	to 8.00	10.00	to 25.00	0.00	to 20.00
Maryland	1.50	to 10.00	2.00	to 12.00	3.00	to 8.00	6.00	to 12.00
Ophelia	2.00	to 15.00	2.00	to 12.00	3.00	to 8.00	5.00	to 12.00
Adiantum	.75	to 2.00	..	to ..	1.00	to 1.50	1.00	to 1.50
Asparagus plum (100 bchs)	.15	to .50	..	to ..	..	to ..	25.00	to 50.00
spren	.25	to .50	..	to ..	..	to ..	25.00	to 45.00
Asters	.50	to 1.00	.50	to 2.00	2.00	to 3.00	..	to ..
Bonapart	1.50	to 6.00	..	to ..	..	to ..	..	to ..
Calendulas	2.00	to 4.00	..	to ..	..	to ..	2.00	to 4.00
Carnations	3.00	to 4.00	1.00	to 3.00	3.00	to 4.00	3.00	to 4.00
Chrysanthemums	.50	to 3.00	3.00	to 4.00	15.00	to 15.00	15.00	to 15.00
Ferns, Hardy	1.50	to 2.00	..	to ..	25.00	to 30.00	..	to ..
Galax leaves	..	to 2.00	..	to ..	12.00	to 15.00	..	to 15.00
Gladioli	4.00	to 5.00	4.00	to 8.00	..	to ..	..	to ..
Lillies Rubrum	5.00	to 6.00	..	to ..	6.00	to 8.00	..	to ..
Orchids Cattleyas	75.00	to 125.00	25.00	to 75.00	50.00	to 60.00	..	to ..
Orchids Cypripediums	..	to 1.00	..	to ..	..	to ..	..	to ..
Smilax	..	to ..	..	to ..	..	to ..	15.00	to 20.00
Sweet Peas	2.00	to 2.50	1.00	to 3.00	2.00	to 4.00	1.50	to 2.00
Snap Dragon	.75	to 1.00	..	to ..	4.00	to 8.00	4.00	to 6.00
Violets	.60	to 1.00	..	to ..	.50	to 1.00	.50	to 1.00

RAMBLING OBSERVATIONS OF A ROVING GARDENER

No doubt many gardeners have been rather sceptical as to the hot water treatment for dahlias which has been sometimes recommended. Not long ago, however, I stumbled onto a proof of the value of this treatment in practical experience. It was at one of the fall shows. An exhibitor arrived with a large collection of cut blooms which were in a badly wilted condition. It seemed that he had been obliged to cut the flowers at noon and as the day was unusually hot they had succumbed very quickly to the high temperature. When this man opened box after box it seemed impossible that he could make any show at all, but he was not discouraged. He made a demand for boiling hot water which brought him six or eight buckets full. He arranged them in a row on the floor and plunged his dahlia blooms into the water half the length of the stems and more, in many instances not taking the time to remove the leaves, although that is generally recommended.

It was interesting to watch the faces of several ladies who happened to be present, although the show had not opened. Some of them went so far as to remonstrate with the grower, assuring him that his flowers would be ruined by such drastic treatment. After all, though, there wasn't much point in this argument, for the flowers seemed ruined already by the heat; but to these ladies it seemed almost like an inhuman act to soak them in water at boiling temperature.

However, the grower went placidly ahead and in half an hour the flowers were seen to be straightening up and assuming their normal form. They were left in the water for fifteen or twenty minutes longer, by which time they had regained most of their good looks. Then they were removed and staged in vases filled with cold water, with the result that by the time the exhibit opened they looked as well as when they were cut.

This was a convincing proof of the efficacy of the hot water method of reviving wilted flowers, a method which can be applied to some other kinds which have woody stems. As is well known to florists poinsettias are always dropped into pails of hot water as soon as gathered, this being absolutely necessary apparently to insure their keeping satisfactorily.

As long as I have talked so much about dahlias, perhaps I might as well continue for one more paragraph. Those gardeners who live near the salt water get a quality of bloom which is seldom found inland. This has been noticed time and again. Even commercial growers have been surprised sometimes at the dazzling colors shown by flowers in amateur's seaside gardens. These flowers have a brilliancy far surpassing that of the same varieties in commercial rows. Yet one does not need to live by the seashore in order to have good dahlias, and in this connection it is interesting to find that the people of New Mexico are just now developing a sort of dahlia craze. Apparently this flower has not been grown there extensively at all until the last two or three years. Now great numbers of orders have come to growers from residents of New Mexico who find that the flowers flourish well there. One might expect peculiar advantages from such a warm location, but it seems that it becomes necessary even there to dig up the roots, not for protection from the cold weather, but to give them a rest.

It is a pleasure to learn that the new La France everbearing raspberry is to be put on the market next season. This gives promise of being the best berry of this type which has yet been given to the public. A large stock has been grown at Stamford, Conn., this season and everybody who has seen the plants and the fruit have been enthusiastic over the new variety. The size and vigor of the canes is quite remarkable. The fruit is large, finely colored and of good fla-

vor. When I first saw the berry at a Massachusetts Horticultural Society exhibit, I was greatly impressed with it. It seems to be exceedingly prolific, bearing until cut down by the fall frosts. I anticipate that it will prove in the long run much more free fruiting than the now well known St. Regis, which so far has been the best berry of the type that I have grown.

Erskine Park is highly recommended, but has not proved very satisfactory with me. It took some time for people to get accustomed to the idea of having raspberries in the fall, but garden makers everywhere are now becoming enthusiastic over fruit of this type which certainly is most acceptable late in the season when berries of all other kinds except the fall bearing strawberries have passed. The accompanying photograph gives a good idea of the handsome appearance which the La France berry makes when served on the table.

A GOLD MEDAL ORCHID.

Albert C. Burrage (Douglas Eccleston, gardener) placed on exhibition at Horticultural Hall, Boston October 18, a very rare and beautiful orchid plant in flower for which he was awarded a gold medal. It was *Brasso-laelio-Cattleya The Baroness*, a cross between *Brassocattleya Leemanniae* and *Laeliocattleya Ophir*. It is the only specimen of this hybrid orchid in the United States and was publicly exhibited for the first time.

The flower is a rich golden yellow with light purple markings at the base of the beautifully fringed labellum.

Mr. Burrage exhibited also a specimen of *Cattleya Moira alba*, a cross between *Cattleya Mantinii* and *Cattleya Fabia alba*; sepals and petals pure white, lip crimson with the yellow throat markings of *Cattleya Dowiana*. This was awarded a silver medal.

Mr. Burrage is rapidly developing the largest private collection of orchids in this country.



The New Raspberry La France

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Lilium Giganteum **GLADIOLI**
For Forcing

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**George Watson's
Corner**

"You in your small corner and me
in mine."

C. H. Grakelow reports that the Flower Week Campaign was a big success and begs to extend his thanks to all who helped in making this drive for the general good of the business. The big hotels who got flowers were especially tickled and many of them have put in regular orders at market prices for the balance of the season. The benefits to the trade cannot help but be beneficial and this will be especially noticeable among the more conservative concerns in the outlying sections of the city, although those in the central parts who were already active advertisers, also benefit along with the rest.

In this connection the florists should make it their business to remember that the old-fashioned flower show is another good way of stimulating public interest, and deserves their active support and participation. The

Pennsylvania Horticultural Society gives such a show in the armory at Broad and Callowhill, week of November 5th next, and while it is not a trade exhibition there is nothing to hinder the trades making themselves a part of it for exhibition purposes even if the prizes offered are mostly for amateurs and gardeners.

Ed. Fancourt reports that the florists passed an appropriation of twenty-five thousand for billboards at the Buffalo meeting. J. Horace McFarland's letter was read, but they persisted in staying in the hog-pen. Wow! Won't Harrisburg Howl!!

Frank M. Ross, superintended the delivery of flowers to all the hospitals in Philadelphia. Mr. Ross is to be congratulated for the efficiency with which he handled his part, with the able assistance of the rest of the committee. Every hospital, public and private—not forgetting the Sisters of Mercy, Kirkbride's, or even the Poorhouse—they all got their share and were cheered by this burst of floral sunshine in a gloomy world.

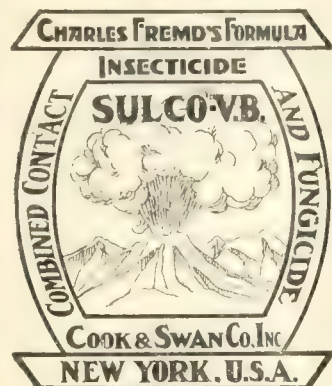
A fine exhibit of named dahlias was a feature of the Michell display for flower week. These were staged in

their front window at 518 Market street, under the artistic eye of Philip Frend—one of the past masters at this kind of work—and proved a very attractive show with the slogan card of the florists displayed in half a dozen places. One variety especially attracted attention. This was Dr. Taevis, a pink and white decorative, about as big as your hat. If it was not quite as big as some hats the ladies wear at least they all had to take their hats off to it—metaphorically speaking.

PHILADELPHIA.

Philadelphia visitors: Harry A. Bunyard, New York City; Einar Knutson, rep. Hjalmar Hartmann & Co., Copenhagen, Denmark; John F. Horn, Allentown, Pa.; Paul Klingsporn, Clarence Ellsworth, rep. J. F. Kidwell Co., Chicago, Ill.; F. J. Moreau, Freehold, N. J.; John A. Brown, Capitola, Cal.; M. J. Brinton, Christiana, Pa.; E. A. Harvey, Brandywine Summit, Pa.; J. A. Patterson, Baltimore, Md.; Karl P. Baum, Knoxville, Tenn.; John Walker, Youngstown, O.; W. G. Mathews, Dayton, O.; Thomas H. Joy, Nashville, Tenn.; A. Yeager, Allentown, Pa.

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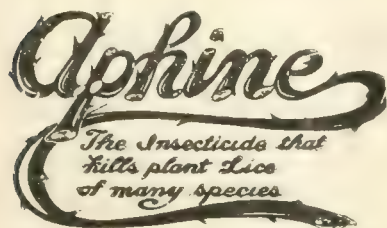
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A spray remedy for green, black, white, thrips and soft scale.
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Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to direction, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

1/2 Pint, 30c.; Pint, 50c.; Quart, 90c.; 1/2 Gallon, \$1.50; Gallon, \$3.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00. Directions on package.

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THE LANCASTER COUNTY FLORISTS ASSOCIATION.

The meeting was opened at 7.45 p. m., Thursday, October 16, with the President, the Secretary, two other male members and two members of the Ladies' Auxiliary present, the smallest meeting since the organization of the Club

This was due to two causes, the first and principal one being that just about the time members should have been leaving their homes for the meeting a violent thunder storm covered the country and second, because the Program Committee had arranged no program to attract the members.

Mr. S. S. Pennock of Philadelphia was a visitor and had the pleasure of shaking hands with all present.

An invitation was read from the Baltimore Florists Club to attend their Ladies' Night, but on account of the small attendance no action was taken.

The Secretary presented a telephone invitation from the Chester County Florists' Association to make a visiting trip to Chester County in the near future and the Automobile Committee were instructed to get busy and secure machines for this trip on October 30.

Mr. P. W. DeHertogh was elected to membership.

Mrs. Albert M. Herr, Mrs. B. F. Barr and Mrs. A. K. Rohrer were added to the Program Committee and this will be the last meeting without any definite program.

ALBERT M. HERR.

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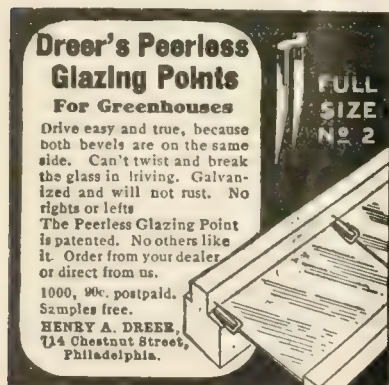
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Asparagus plumosus seedling: \$1.00 per 100; \$6.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

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Peony Dahlias Mrs. Frederick Grinnell.
\$10.00 per clump. Cash with order.
JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker, Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

DAISIES

Daisies, Bellis, Monstrosa, pink or white, also Long Fellow and Snowball, fine strong plants, \$3.00 per 1,000, \$8.25 for 3,000. CASH. BRILL CELERY GARDENS, Kalamazoo, Mich.

GARDENIA VEITCHI

Gardenia Veitchi, 6 inch, pot grown.
\$7.50 a dozen, \$50.00 per 100.
BOBBINK & ATKINS, Rutherford, N. J.

INSECTICIDES

PERCO-BRAND INSECTICIDES.
A Standardized, Complete and Inexpensive Line. Ask for Prices.
PERFECTION CHEMICAL CO., INC.
151 H Washington St., Flushing, N. Y.

KENTIAS

Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2½-inch pots at \$15 per 100—larger quantities on application. J. H. FIESSER, 711-741 Hamilton Ave., North Bergen, N. J.

ORCHIDS

HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laelio-Cattleyas our specialty. One trial order solicited.

PANSY PLANTS

Pansy Plants, strong and stocky, "Superb Strain," \$4.00 per 1,000, 3,000 for \$11.25, 5,000 for \$17.50, cash. These plants and strain will please you. BRILL CELERY GARDENS, Kalamazoo, Mich.

PEONIES

Peonies. The world's greatest collection, 1200 sorts. Send for list. C. BETSCHER, Canal Dover, O.

POINSETTIAS

Poinsettias, 3 inch, \$15.00 per 100. 2½ inch, \$12.00 per 100; \$100.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

SPHAGNUM MOSS

Live Sphagnum Moss, orchid peat and orchid baskets always on hand. LAGER & HURRELL, Summit, N. J.

VINES

Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. J. H. TROY, Mount Hissarlik Nursery, New Rochelle, N. Y.

WEED EXTERMINATORS

PERCO-BRAND POWDERED WEED EXTERMINATOR.
Inexpensive. Efficient.
PERFECTION CHEMICAL CO., INC.
151 H Washington St., Flushing, N. Y.

WIRE WORK

WILLIAM E. HEILSCHER'S WIRE WORKS, 264 Randolph St., Detroit, Mich.

HELP WANTED

WANTED a working foreman. Must be a good grower of all potted plants, cut flowers and roses, with some experience in making up. Wages \$35.00 per week. Located 150 miles east of Boston. Only a man of ability and a worker need apply. First class references required. Address "O. M. P." care HORTICULTURE.

MR. GREENHOUSE OWNER:

Have you ever given careful consideration to the cost of your fall repair work? If not, now is the time to make preparations for reducing this cost. Our line of Greenhouse Fittings will be found just the thing for practically all of the work which you intend to do. Write for descriptive catalog on Sash Operating Device and Greenhouse Fittings. It will repay you many times. Write today.

ADVANCE CO., Richmond, Ind.



DUTCH AND OTHER BULBS

Of the following offered stock the DUTCH BULBS can be shipped at once—the others as they arrive. All prices are understood packed and F. O. B. cars or steamer New York.

J. S. CROWN BULBS

NARCISSUS EMPEROR, double nosed, XXX.....	\$36.00	per 1,000
NARCISSUS EMPRESS, double nosed, XXX.....	36.00	"
In lots of 10,000 or more, both varieties.....	35.00	"

October delivery. These are large bulbs selected for forcing.

VALLEY PIPS

VALLEY PIPS, Holland grown, selected for forcing.....	\$18.00	per 1,000
---	---------	-----------

November delivery. Case lots only. Cases contain 2,500 pips.

DUTCH BULBS

"D. N." means double nosed. Tulips are sold only in multiples of 250, Hyacinths in multiples of 50, Miniature Hyacinths in multiples of 100—as they come that way in bags we cannot break bags.

SINGLE EARLY TULIPS

Rose Gris de Lin	\$24.00	per 1,000	La Reine Maxima.....	\$36.50	per 1,000
Keizerkroon	35.00	"	La Reine (Queen Vict.).....	30.00	"
Yellow Prince	32.00	"	Vermillion Brilliant	47.50	"
White Swan (True).....	30.00	"	Prosperine	46.75	"
White Hawk	30.00	"	Mon Tresor	46.75	"
Duchess de Parma.....	30.00	"	Coleur Cardinal	48.50	"
Rose Louisante	34.25	"	Flamingo	50.00	"
Prince of Austria	35.00	"			

DOUBLE EARLY TULIPS

Snow Ball	\$24.00	per 1,000	Couronne d'Or	\$47.00	per 1,000
Murillo	30.00	"	Imperatur Rubrorum	50.00	"

DARWIN TULIPS

Painted Lady	\$22.50	per 1,000	Massachusetts	\$31.00	per 1,000
La Candeur	26.00	"	Gretchen	29.00	"
Glow	37.00	"	Baron de la Tonnaye.....	25.25	"
Farncombe Sanders	31.75	"	Suzon	30.00	"
Madam Krelage	33.00	"	Rev. H. Ewbank	30.00	"
Erguste	33.00	"	William Copeland	59.00	"

NARCISSUS

Empress (D. N.)	\$42.50	per 1,000	Golden Spur (D. N.)	\$42.50	per 1,000
Victoria (D. N.)	50.00	"	Sir Watkin (D. N.)	35.50	"
Emperor (D. N.)	42.50	"	Dbl. Von Sion (D. N.)	42.50	"
Poetaz Alsace	26.50	"	Poeticus Ornatus (D. N.)	23.00	"
Poetaz Irene	42.00	"	Glory of Leiden	39.00	"
Poetaz Louise	30.00	"	Barii Conspicuous	24.00	"

HYACINTHS

Your selection of following varieties, 1st size 17-18 c/m	\$85.00	per 1,000
Gertrude	La Victoire	Queen of the Blues

MINIATURE HYACINTHS

Your selection of following varieties, 12-14 c/m.....	\$35.00	per 1,000
Moreno	Gr. a Merville	Queen of the Blues
Johan	La Franchise	L'Innocence
Heroine	Roi des Belges	Lord Macauley
Gertrude	Gr. Vainqueur	Lord Balfour
Ruby	Alida Jacoba	

CAN ALSO OFFER

FOR immediate delivery—RAFFIA.

FOR later delivery—BEGONIA and GLOXINIA BULBS, JAP. LILY BULBS.

Write for prices, stating specifically what you require

TERMS OF PAYMENT 60 days net, less 2% cash 10 days from invoice date. Cash with order from those who have not established credit with us. All stock is offered subject to prior sale.

All goods offered are of the high grade we have exclusively handled since 1902. RELIABILITY is our motto. We own our own building of 7 floors, a city block through, and give prompt, efficient service on all orders that reach us in time.

McHUTCHISON & CO., The Import House, 95 Chambers St., New York

HORTICULTURE

Vol. XXX

NOVEMBER 1, 1919

No. 18

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.



POM PONS

This year finds us with the best stock of Pom Pons we've ever handled, not only as to quality, but variety and quality, as well. A large assortment of colors and shades.

\$3.00, \$4.00 \$5.00 per doz. bunches.

POM PON SPECIAL

Our selection, \$3.00 a doz. bunches; 25 or 50 bunches at \$2.50 per doz. bunches; in lots of a hundred or more, \$15.00.

CHRYSANTHEMUMS

Whites, Pinks and Yellows; Large, Medium and Small. \$10.00, \$15.00, \$20.00, \$25.00, \$30.00 per 100.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.

S. S. PENNOCK COMPANY

The Wholesale Florists of Philadelphia

NEW YORK 117 W. 28th St. PHILADELPHIA 1608-1620 Ludlow St. BALTIMORE Franklin & St. Paul Sts. WASHINGTON, 1216 H St., N. W.

FERNS

THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we **RECOMMEND IT MOST HIGHLY.**"

Strong plants, 2½-inch pots....\$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots.... 7.50 per dozen, 50.00 per 100
Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:		Each
Elegantissima, elegantissima compacta, and Muscosa, 3½-inch		\$0.35
Elegantissima and elegantissima compacta, 6-inch		.75
Muscosa, 5-inch		.75
Elegantissima and elegantissima compacta, 8-inch		2.00
Elegantissima and elegantissima compacta, 10-inch		4.00
Harrisii, 8-inch		3.00
Dwarf, Boston, 8-inch		2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown. N. Y.

FERNS

We have an excellent lot of pot grown Boston and Scottii Ferns ready for an immediate shipment before cold weather sets in. The following price will hold good during November. Shipped without pots.

Size	Doz.	100	1000
3 inch.....	\$1.00	\$ 8.00	\$ 75.00
4 inch.....	3.00	20.00	190.00
5 inch.....	4.50	35.00	325.00
8 inch, \$1.50 each.			

ALTERNANTHERAS, Alyssum, Double Giant and Dwarf, **Begonias** Gracilis and Vernon mixed colors, **Coleus** Standard sorts, **Hardy English Ivy**, **Lantanas**, assorted, **Heilotrope**, **Lobelia**, Crystal Palace Gem, **Moonvines**, 2-in. \$2.75 per 100.

Send for Catalogue Cash With Orders --

R. Vincent, Jr., & Sons Co.
WHITE MARSH, MARYLAND

Henry H. Barrows FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTTY
CHRYSANTHEMUMS
MADISON, N. J.

Nephrolepis Norwood
Best Crested Fern

4 inch pots, extra heavy, \$25.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

**CHRYSANTHEMUM
SPECIALISTS**

ELMER D. SMITH & CO.
ADRIAN, MICH.

Snow Queen Canna
Awarded Certificate of Merit at N. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The **CONARD & SONS CO.** WEST GROVE, PENN., U.S.A.

Robert Perry, Penn. Antonio Whitman, Vice-Pres.
We are subscribers to the Nurserymen's Fund for Market Development

ROBERT DYSART
CERTIFIED PUBLIC ACCOUNTANT

Simple method of correct accounting especially adapted for florists' use.
BOOKS BALANCED AND ADJUSTED
40 STATE STREET . . BOSTON
Telephone Main 58

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 415, DUNDEE, ILL.

E. W. FENGAR
CHRYSANTHEMUMS

147-167 Linden Ave.
IRVINGTON, N. J.

S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN

Our publicity committees, and all connected with our campaign, are fully convinced of the latent interest on the part of florists in our publicity work, an interest which only needs awakening to make forthcoming the support we so urgently need at the present time. They are also quite sure that among those who have already subscribed are to be found many who could influence their brothers in the trade to rally to the campaign standard. To such, the following letter might furnish a suggestion:

"Office of Charles A. Dards, Inc., New York, October 16th, 1919—To Mr. Albert Pochelon, 153 Bates street, Detroit, Mich. Dear Mr. Pochelon: Won't you kindly accept the enclosed cheque for \$50.00 in connection with the F. T. D. A. National Publicity Fund, this to be considered as a separate contribution to any contract we may have already. Mr. and Mrs. Penn of Boston, who have just returned from the convention, have only this minute left the store, and Mr. Penn's personality, enthusiasm and good fellowship so worked on my personal feeling that it behooved me to immediately show my appreciation in the above matter.

Cordially yours,

H. C. PERRY,
General Manager."

Commenting upon the letter. Mr. Pochelon says: "Mr. Perry of Dards' is not different from a good many other retailers—they are feeling the benefits daily, and feel that it is their duty to do more, or, at least, do as much as they can."

A just appreciation of the work of the campaign is the only reward expected for the labor of those engaged in it, and could any appreciation be shown better than in support to our project? A florist who fails to subscribe to the campaign fund is really failing to promote his own interests. Everyone in the trade is benefiting from the publicity we are securing, and the more we are able to secure, the greater the benefit resulting.

Our committees spend as they go, therefore must, if the campaign is to last, have money wherewith to keep on going. Our slogan, "Say it with Flowers," should remain for all time before the public, continuously. There should be no halt. Were subscriptions to stop, the work would have to be a-

JUST RECEIVED
HOLLAND BULBS
FREESIA PURITY
3/4 INCH UP

Prices on Application

J. M. THORBURN & CO.

53 Barclay Street
Through to 54 Park Place
NEW YORK CITY

KELWAY & SON
SPECIALIZE IN
SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

**DUTCH BULBS
PAPER WHITES
JAPANESE LILIES**

Write for prices

AMERICAN BULB CO.

172 N. Wabash Ave., Chicago, Ill.

Burpee's Seeds
PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Re-selected Strains in Seeds.
Improved styles in Implements
Catalogue upon application.

16 So. Market Street
BOSTON, MASS.

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, sociology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time.

Circulars and other information will be mailed on application.

The New York Botanical Garden

Brass Park NEW YORK CITY

terially curtailed, and the present improved demand for flowers would necessarily decline. No real florist would want this to happen—it would be a calamity. To prevent it, and to enable the committees to fully carry out their plans, there should be an end to latent interest, and the many hundreds of florists—we could say thousands—who know in their hearts that the campaign is of immense benefit to our industry should lose no time in registering their subscriptions with the secretary. Making a subscription entails no sacrifice, for there is hardly a florist in the country who cannot afford one, and it should be considered a duty and a pleasure to support an undertaking which is productive of so much good to growers and retailers alike.

Florists who advertise locally can have material assistance in their work, and connect in a profitable way with our magazine advertising, by using the various helps supplied by our Promotion Bureau. Pamphlets describing these aids will be mailed to anyone on application for them. It might be mentioned here that the advanced cost of labor and materials have obliged our Promotion Bureau to advance the price of the large electrotyped advertisements to \$1.25 each, which is actual cost on quantity purchases.

A CORRECTION.

Two weeks ago we published a list of florists whose subscriptions of \$200 or more each aggregated one-seventh of the Publicity Fund as then collected. We gave the list as of 25 florists, but only 24 names were printed, the name of Schiller The Florist, Chicago, \$200, being accidentally omitted. Another name omitted was that of The Jos H. Hill Co., Richmond, Ind., \$200, which would have made 26 names to the list instead of 25. The correction is made with due apology for the omissions.

JOHN YOUNG, Secy.

THE MARKET.

Mums are a very heavy factor in the market and while they sell well have a certain depressing effect on other stock. Almost every city has a number of good "mum" growers who are unloading large quantities of flowers just now. In New York and in markets further South, much outdoor stock is still being offered.

Some snapdragons and violets are coming in and meeting with favor. Apparently Bouvardia is once more increasing in popularity, as it is being widely displayed by the retail stores. Paper whites made their first appearance in the Boston market a few days ago, being handled by William Carr.

CARNATION CUTTINGS

For December and later delivery. There will be a shortage. We advise ordering early.

	100	1000
Ruth Baur	\$12.00	\$100.00
Ethel Fisher	14.00	115.00
Morning Glow	7.00	65.00
Laddie	10.00	90.00
Pink Delight	7.00	60.00
White Benora	7.00	65.00

Enchantress Supreme, Rose Pink Enchantress, Mrs. C. W. Ward, Merry Xmas., Rosalia, Aviator, Nebraska, Beacon, Crystal White, White Enchantress, White Wonder, Miss Theo, Belle Washburn.

\$6.00 per 100 \$50.00 per 1000

Matchless, Pink Enchantress, Alice, White Perfection

\$5.00 per 100 \$40.00 per 1000

PEONY CLUMPS

White, pink and red, averaging 15 to 20 eyes per clump \$50.00 per 100.

BULBS: Clearing out now for the season. Send for our Bargain List.

C. U. LIGGIT, Office
103 Bulletin Bldg. Philadelphia, Pa.

IBOLIUM

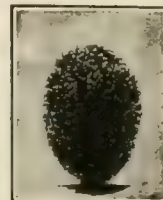
THE NEW HYBRID

HARDY PRIVET

(L. Ibota x Ovalfolium)



Natural Habit



When Trimmed

Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery. The Elm City Nursery Co., WOODMONT NURSERIES, INC., New Haven, Conn. Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.

We are Headquarters for the BEST OF EVERYTHING IN VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for crop of 1919.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties
Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue
CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg. Boston, Mass.

IF in need of RELIABLE NURSERY STOCK
that is well grown, well dug and well packed
Send to the **BAY STATE NURSERIES**
Wholesale and Retail **NORTH ABINGTON, MASS.**

NOT TOO EARLY TO Buy Christmas Stock Now

Get your stock before the other fellow picks all the best. Finish the plants in your own houses and save disappointment later on from express delays, damaged plants and unfilled orders.

Stock listed below is all of best quality. Grown by experts and packed carefully

Extra heavy ADIANTUM HYBRIDUM, 6 in., \$75.00 per 100.

Extra good CHATELAINE BEGONIA, 2½ in., \$7.00 per 100, \$65.00 per 1000. 3 in., \$12.00 per 100.

CALENDULA Orange King, the O. K. strain. The result from a number of years of greenhouse selecting. If you want the best let us supply you. \$5.00 per 100, \$45.00 per 1000.

BIRD'S NEST FERN. Excellent stock. 2½ in., \$18.00 per 100; 3 in., \$27.50 per 100.

FERNS

Nephrolepis, Verona, Dwarf Boston, Scottii, Elegantissima, Teddy Jr., Roosevelt

POT-GROWN 100
2½ in. \$12.50
4 in. 50.00

BENCH BOSTONS

Ready for 4-in. pots, \$50.00 per 100.

PTERIS Wimsettii and Victoria, 3 in., \$16.00 per 100.

PTERIS Rivertoniana. 3 in., \$20.00 per 100.

The above are especially fine—ready for 4-in. pots.

FERNS for fern dishes. As- 100 1000
sortment of best sorts.
2½ in. \$6.00 \$56.00
3 in. 12.00

KENTIA Belmoreana. Strong Doz. 100
2½ in. \$1.50 \$12.00
3 in., \$25.00 per 100. 4 in., 50c. each

IVY, English. 3 in., \$8.00 per 100.

CINERARIA

Selected strain, 2½ in., \$7.00 per 100; \$65.00 per 1000.

WINTER FLOWERING FORGET-ME-NOT. Best Boston Market Forcing Strain. \$7.00 per 100, \$65.00 per 1000.

SNAPDRAGON. Ready now. Nelrose, Silver Pink, Enchantress, Keystone, Phelps White and Yellow, 2½ in., \$6.00 per 100, \$55.00 per 1000.

BEGONIA MRS. M. A. PATTEN. Dark sport of Chataelaine. Buy now and have them ready for Xmas. 2½ in., \$10.00 per 100.

Boston Yellow Marguerite

We offer a carefully selected strain, grown by a specialist in this line and furthermore send out no blind plants. They are worth the price. 2½ in., \$10.00 per 100; 5½ in., heavy blooming stock for quick results, 50c. each.



BEGONIA. A good offer in Melior and Cincinnati. Strong, bushy plants from leaf cuttings. 3½ in. ready to repot in to 5-in. at 50c. each. 2½ in. from top cuttings, strong plants, 25c. each.

CYCLAMEN. Blood red, salmon, crimson, white carmine eye, 4-in. ready for 5-in., 50c. Big, fancy plants in 5-in. pots at \$1.35 each.



SIM'S YELLOW POLYANTHUS

The Best on the Market
Winter flowering clumps
ready now.

\$8.00 per 100 - - \$75 per 1000

TWO NEW FERNS NEPHROLEPIS MACAWII

A Winner

2½ in., \$20 per 100.

THE VICTORY FERN (Nephrolepis Victoria)

Bronze Medal at Detroit.

Per Doz. Per 100
2½ in. pots \$3.00 \$20.00
3½ in. pots 7.50 20.00

OTAHEITE ORANGES, for growing on. 2½ in., \$20.00 per 100.

LATANIA Borbonica, Fan Leaf Palm. 3 in., \$30.00 per 100.

ARECA Lutescens, 2½ in., single plants. \$15.00 per 100; 2½ in., made up three plants to the pot, \$20.00 per 100.

ASPARAGUS Plumosus, seed 100 1000
lings \$8.00 \$5.00
2½ in. \$7.00 45.00
3 in. 10.00

Sprengeri Seedlings 7.00
Sprengeri, 2½ in. 5.00 45.00
3 in. 10.00

CHRISTMAS JOY PEPPER. Heavy. 4½ in. pots, \$30.00 per 100. Well set with Berries and colored. A Bargain.

Asparagus Plumosus Seed

Massachusetts greenhouse grown, 1000 \$3.00; 5000 \$13.50.

Coeleus Trailing Queen

fine for mixed pan. basket and hamper work. 2½ in., \$6.50 per 100, \$60.00 per 1000

Crotons

Nice 2½ in. plants. Get your stock now and be ready for your mixed pans and hampers for the holidays. A good assortment of highly colored sorts both broad and narrow leaf types. \$35.00 per 100.

Dracaenas

Godseffiana, Sanderiana, Lord Wolseley, Kellerman and Terminalis. They are highly colored and just right for mixed pans and hampers for the holidays. You will save money by getting them now. Strong. 2½ in. pot plants. \$25.00 per 100; 3 in., select stock, \$40.00 per 100.

GYPSOPHILA SEED (Nicholson's Forcing Strain)

Earliest and Best

¼ oz., \$50c.; ½ oz., 85c.; 1 oz., \$1.50

GIGANTEUM LILIES

We still can supply ALL SIZES.

Let us quote you RIGHT PRICES on best quality and amount you want.

Next lot due November 5th. Ask us about special offer on 6½-7 size. It will interest you.

Easter Sunday (1920) falls on April 4th

Cash or satisfactory trade references.

No C. O. D. Shipments.

L. J. REUTER CO. Plant Brokers

15 Cedar St., Watertown, P. O.
BOSTON, MASS.

HORTICULTURE

Vol. XXX

NOVEMBER 1, 1919

No. 18

THE TALK OF THE TRADE

I was talking a few days ago with J. K. Alexander, the dahlia man of East Bridgewater, Mass., and was surprised to learn from him of the increased demand for dahlias from florists. This was a surprise, as I say, because the reports from the flower market had indicated that dahlias had not been sold very heavily through them. It would seem as though many dahlias have gone direct from growers to retailers. There is every reason to believe, too, that this demand will continue to grow from season to season, for more attention is being paid to the growing of dahlias which are of special value for cutting.

The pompons have proved very popular, Mr. Alexander says, because of the fact that they can be used more advantageously in making up set pieces. The colors are not harsh and the shape and size make them easy to handle. Moreover, they keep well when cut.

One of the most popular of the florists' dahlias appears to be Maude Adams. This is a show dahlia, white with a light edging of pink. Reports have come from the west saying that Maude Adams has met with wonderful success there, many florists using it in great numbers. It has a strong stem and stands up remarkably well when placed in water.

A dahlia which has been perhaps more generally used in the west is King of the Autumn. Undoubtedly this is one of the finest decorative dahlias ever introduced, with unusually strong sturdy stalks and long, stiff stems which endure hard winds without breaking, and answer every requirement of the decorator or florist. It is a fairly large flower and of a color which is difficult to describe. Perhaps an idea of this color may be obtained by saying that it is buff yellow suffused with terra cotta. The effect is one of great delicacy and charm, and this effect is maintained even under the strong glare of the electric lights.

King of the Autumn is rather expensive at present, but in my opinion it is to prove in the long run one of the most satisfactory of all dahlias regardless of type for florists' use.

Florists who are able to grow a certain number of dahlias for their own use will not go wrong if they stock up with Maude Adams, King of the Autumn, Jean Kerr and several varieties of the pompom.

I believe the time is coming when the collarette dahlias are going to be used generally by florists, too. So far they are not very common and much needs to be done to introduce new colors, especially shades of pink which make the strongest appeal to florists' customers. The collarette dahlia has a peculiar fascination and keeps as long as any kind when cut. The single dahlias, while attractive when growing, are a great disappointment as cut flowers and are not to be recommended for that purpose. This applies too, to the cactus dahlias as a type, but some of the hybrid cactus varieties stand up very much better.

It has been hard to convince some people in the trade that the dahlia had possibilities as a florists' flower, but the experience of the last two seasons has shown that certain forms of dahlia can be used with perfect satisfaction to customers, and that they can be handled at a very good profit.

English florists are not happy over the bulb situation, as may be judged from the following plaint by a writer in the Horticultural Trade Journal of London.

"A while since, I referred to the unfavorable outlook in regard to Japanese Lilliums. Information has now come to hand that the crop of *L. longiflorum* formosum is exceedingly small, and that the bulk of the available bulbs of this important lily has been snapped up by America, prices running as high as 100 dollars a case. The few Formosums we are likely to get, will probably be disposed of within the next week or ten days, and doubtless will be eagerly bought up. There are practically no stocks of retarded longiflorum in the country, so there is little likelihood of anything approaching required supplies of bloom early next year, and especially at Easter. We must simply make the best of things that cannot be avoided, and cast about us for substitutes."

After all, however, turn about is fair play.

If all reports are true, the Englishmen got ahead of us when it comes to giganteums. They were on the ground in force early in the season and gobbled up about everything that was to be had. The result is seen in the shortage here. That being the case, why should they fuss so much about formosums? Then, too, the statement that prices in America have run as high as \$100 a case is somewhat exaggerated. There may be instances where this figure has been touched, but the prices for the most part have not exceeded \$80.

The first Paper-whites have reached the Boston market, having been sent in by W. W. Edgar. They are being sold in pans and were received with favor. It is interesting in this connection to note that as was predicted, prices of bulbs have steadily increased. This holds true, I think, with all bulbs except possibly Freesias. Some weeks ago tulips could be had for \$22. Now they are \$25 and going higher. Just what point the various bulbs will reach nobody can say, but there certainly will come a time when it will not pay a grower to purchase them. Probably \$30 is as much as anyone can afford to pay for tulips and \$40 should be the outstanding price in my opinion for narcissi.

FORCING IRIS TINGITANA.

Dear Sir: Please tell me how to force *Iris Tingitana*, when to bring it in, the kind of soil and temperature required.

SUBSCRIBER.

You can use any good potting soil, preferably with a fair amount of sand or leaf mold, but the drainage should be extra good. The bulbs should be buried below the frost line, of course, and left there until thoroughly good root growth has been made. Probably the middle of December will be about the right time to take them inside. Then they should go to a cool house, one where the temperature is 50 to 55, and left there until the top starts to grow well. Then they may be given a temperature of 65, but should not be allowed to go much higher. It is most important to grow this *Iris* cool or results will not be satisfactory.

POM POMS FOR ARMISTICE DAY. A Suggestion Which Should Prove of Interest to Florists.

On June seventh issue of *Horticulture* an article appeared under my name, in relation to the wearing of a pompon chrysanthemum on armistice day. I was forced to write on this subject on that early date, because the time for inserting the cuttings—sounded the last call.

Why should we hesitate to bring this demonstration of honoring our dead heroes to the attention of the public? This beautiful and silent tribute to these brave men, who now lie sleeping in the blood stained fields of Europe, ought to be encouraged. It should not only be national but international, because very few homes in the world have not sacrificed the loss of some brave hero or heroine in the great conflict.

It seems to me the florists and publicity committees of the various horticultural organizations, ought to encourage and push the adoption of this beautiful custom, to a successful and concrete conclusion.

Let us get together and make the little pompon chrysanthemum display on the eleventh day of November a token of respect, reverence and crystalized admiration for these brave men and women who died in the great conflict.

RICHARD J. HAYDEN,
Pres. Park and Recreation Dept.,
Boston.

AWARD OF THE WHITE MEDAL OF HONOR.

The Board of Trustees of the Massachusetts Horticultural Society has awarded the George Robert White Medal of Honor for the year 1919 to the horticultural firm of Vilmorin-Andrieux & Co., of Paris, France.

In presenting the name of this firm of seedsmen as a worthy recipient of the award the special committee, consisting of Messrs. Sargent, Farquhar and Roland, stated that the Vilmorins had done a great work in the introduction of improved forms of garden plants and vegetables. They were also deserving of this honor for supplying seeds of vegetables and flowers during the past few years, thus making them available in this country in the absence of other sources of supply on account of the war. Numerous species of ornamental garden plants were first introduced by this firm; among them may be especially mentioned species

of Berberis, Clematis, Cotoneaster, Deutzia, Rosa and Rhododendron.

This is the eleventh award of the White Medal which is given annually in recognition of eminent service in horticulture.

WM. P. RICH, Secy.
Boston, October 27, 1919.

NEW ORCHID.

Visitors to Horticultural Hall, Boston, two weeks ago were greatly interested in the rare orchid specimens exhibited by Albert C. Burrage, with Douglas Eccleston in charge. The specimen of *Brassolaelia-Cattleya* aroused special admiration. It marks the first successful attempt to produce a yellow *Cattleya*. It was first exhibited at Covent Garden in London, and it was the original plant which was shown at Horticultural Hall here. It is the only specimen of the kind in the United States, and had never before been put on exhibition. The accompanying illustration conveys some idea of the beauty of this orchid, although of course lacking the wonderful charm of its coloring. It is a cross between *Brassocattleya Leemanniae* and *Laeliocattleya Ophir*. When exhibited in London it secured a certificate, which means a great deal, for

these are not awarded except for highest merit and after careful investigation.

The collection of orchids which Mr. Burrage is assembling at his home in Beverly is the largest and costliest of any private collection in the country. The value of the single specimen illustrated is placed at about \$650.00. Some weeks ago it was announced in the press that Mr. Burrage's collection was to be placed on public exhibition, but this announcement was a little premature. However, Mr. Burrage expects to share the beauty of his flowers with other flower lovers, and doubtless will be one of the largest exhibitors at the epoch-making orchid show to be staged in Horticultural Hall next spring.

CHRYSANTHEMUM SOCIETY OF AMERICA.

Report of new chrysanthemums submitted to the committee appointed by the society.

Exhibited at Cincinnati, O., by Elmer D. Smith & Co., Adrian, Mich. Sunray, yellow incurved, commercial scale, 86 points.

Exhibited at Chicago, Ill., by Elmer D. Smith & Co., Sunray, yellow incurved, commercial scale, 87 points.



The New Yellow Orchid

ROSE GROWING UNDER GLASS

ARTHUR C. RUZICKA.

Pay all the attention that is necessary to watering, being careful to see that the plants are not overwatered, and at the same time see that they are not suffering from being too dry. Plants that are growing freely, or that are in full crop, should never be allowed to become real dry, as this would be apt to give them a severe check. However, as soon as the crop shows signs of getting cut off, slack up on the water, and syringe more until the plants start once more. Be careful when cutting to see that no plants are chopped off too close, as they would likely die. Keep some tops to every plant, especially among the Beauties, which grow very tall, and if a plant gets cut off it has no show at all. Should there be any plants in this shape, see that they are marked by dusting a circle of lime around each one, and then when watering, skip these plants, as they need to be kept bone dry until they start growing once more.

Supply of Potting Soil.

See that the supply of soil that will be needed to pot up the young stock is brought in under cover now, or if no cover can be conveniently provided, see that it is heaped near a road where it will be easy to get during bad weather, and then pile up a lot of straw, leaves, etc., near by ready to cover up the heap as soon as it begins to freeze hard enough to freeze the ground. It is not advisable to cover it up too soon. Better wait until the soil freezes an inch or two, and then cover it well, putting straw on top to shed the water, and cover this with boards and stuff to keep it from blowing away. Coarse horse manure can be used for this work, too, and is perhaps the best and cleanest outside of clean straw. Leaves are so apt to hold water that they should not be used unless nothing else is on hand.

Get the Propagator in Shape.

As soon as the mums or whatever crop was grown in the propagating house is out of the way, get right in and clean it up, ready for action. Dispose of all old soil, not by throwing most of it under the benches, but by carefully wheeling it out, and carefully cleaning up under the benches, taking out all the soil that is scraped out, too. Then if there are any places where water is bound to stand, see that a drain is provided to carry it off. Nothing is more disagreeable to roses than

stagnant water, and for this reason and for the looks of the place no pools should be tolerated anywhere. See that all leaky faucets are fixed, also see that the outside of the greenhouses is graded so that no water will run into the houses under the foundations, every time it rains. If the supply of sand is hard to get, better start in getting it, so that it will be on hand when it is needed. It can be piled up in the clean whitewashed benches, and then when it is needed it can be watered and then packed and be ready for use.

Early Propagation.

To have plants early in the spring for planting it will be necessary to start right in now, and keep the sand filled up until enough plants are on hand. It is still warm, so it will be hard to control the temperature at times, but by heavy shading, and by shutting off the heat underneath early enough, the cuttings can be kept fairly cool. See that cheese cloth is stretched across the benches here and there, also along the walks, arranged so that it can be raised for the night. The idea is to break up any draft, yet at the same time admitting plenty of air, insuring good circulation without strong currents.

The Novelties.

There are several new roses to be introduced this coming season that are too good to be allowed to go by, or be passed up by growers. I would never advise anyone to plunge in and grow nothing but one thing, but these new roses are very promising, and should certainly be given a trial as I am sure it would be well worth while, and perhaps very profitable for the grower.

Haul Coal.

Keep at the coal hauling until there is enough on hand to go the whole season and then some. Also any old wood that is not too far gone should be saved and put where it will be handy. Not near the boilers, for no wood should be stored there, but store it in some old shed or else outside somewhere, piling it up so that the water will not get into it too much. Where soft coal is used it should be stored outside, but with hard coal it would be far better to store it under cover, as near the boilers as possible, to save handling. The same with the soft coal. Have it dumped so that it

can be hauled to the boilers without much trouble. With the shortage and cost of labor every possible waste motion must be taken out of rose growing in order to insure profit.

LOOKING AHEAD FOR CHRISTMAS.

If you grow your own stock you will have a goodly supply of plants in your houses, and all you have to do is finish them off well. If you do not grow, and have to buy for your store, it is not too early to find whence your different stocks are coming.

I would start with table ferns. It is almost impossible to have too many of these. Fill your dishes well and charge a good price. You gain nothing by sending out thin-looking fern dishes. But stock up well. The Boston and its various sports are all in demand. They are fairly plentiful now, but good bushy stock will be hard to get at Christmas.

The Cyrtomiums (holly ferns) are splendid sellers at Christmas or at any other time. These are very attractive in six, seven and eight-inch azalea pots.

Palms are very high-priced, but you will need a few. When you sell a Phoenix Roeblini, your customer will come back, for it is a splendid house plant.

A few adiantums in six and seven and a good supply of three-inch pots will be useful in making up with small begonias, poinsettias, euphorbias, etc. Seven-inch pans of these pretty combinations sell well, for they take the place of cut flowers for the Christmas table.

A selection of plant baskets tastefully filled go well if moderately priced. All your baskets which you should buy now should have liners. Also buy some nice pottery.

There will not be many azaleas this year, but you will have your own cyclamen. You should worry—the cyclamen is a splendid house plant. You will sell all the good plants of these you can procure.

Begonia Cinnabati, where cool-grown, is a fine plant for Christmas, but grown warm right up to selling time is worse than useless. Mellor is another good one of the type. Mrs. J. A. Peterson is a gem, but these varieties are hard to buy.

Primula obconica, keremissima and rosea are nice subjects, but not the mauve for the holiday. Chinese primulas are very hard to handle at Christmas, the foliage being so brittle, but there are always some demand

CANADIAN FLORIST.

HORTICULTURE

Established by William J. Stewart in 1904

VOL. XXX

NOVEMBER 1, 1919

NO. 18

PUBLISHED WEEKLY BY
HORTICULTURE PUBLISHING COMPANY
 78 Devonshire Street, Boston, Mass.

EDWARD I. FARRINGTON, Editor.
 Telephone Fort Hill 3694

ADVERTISING RATES:

Per inch, 30 inches to page..... \$1.25

Discount on Contracts for consecutive insertions, as follows:

One month (4 times), 5 per cent.; three months (12 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.

Page and half page space, not consecutive, rates on application.

SUBSCRIPTION RATES:

One Year, in advance, \$1.00; To Foreign Countries, \$2.00; To Canada, \$1.50.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

Advertising flowers

One of the most remarkable features of the Buffalo Convention was the advertising done in the local papers on the Sunday previous. It might well be taken as a text for a sermon on the possibilities of "Say It with Flowers" week. The full page with an ornamental border which the florists succeeded in having published was exceedingly attractive, and the message which it conveyed must have brought home to thousands of readers a new suggestion as to the opportunity for sending floral tokens of friendship, remembrance, or condolence by means of telegraph delivery. The introduction was a gem. Let us quote it for those who did not read it in the original:

"Cupid has gone into partnership with the florists, for the Florist Telegraph Delivery Association is its new side partner, and now the little God of Love is perfectly delighted as he dances over the telegraph wires in an abandonment of glee as the messages of love and good will flash by him. He is in his element with flowers for he has always used them as his most enticing weapon. It is said that he always hides his arrows in a rose, and how could he get his roses if it were not for a florist, so that is the way they came to combine in a partnership."

Mrs. Ella Grant Wilson is certainly to be congratulated on the article which she prepared for this remarkable page, the preparation of which marked a new era in the relations of the florists with the newspapers, and through them with the public. The florists of Buffalo backed up the page with excellent advertisements, that of Palmer being particularly effective, not only for its size but because of the direct way in which it told its story. This advertisement started off as follows:

"Over the wires.

A novel flower service.

Flowers by telegraph.

"How often have you wished to send flowers to mother, wife or sweetheart, or some sick friend in a distant city. Until recent years you could not do so because the distance was too great and flowers were perishable.

"Now there is a way. We are members of the florists' telegraph delivery which is an established association of reliable florists guaranteeing immediate delivery of fresh flowers upon receipt of telegraph orders from fellow members. You can come to either of our two stores, select your flowers and we will wire your order as you specify to our correspondent florist in the city you designate, and he will deliver your flowers just as we would."

Anderson, in his advertisement, somewhat amplified this message. He said, "The florists' telegraph delivery system reaches to every nook and corner of the civilized world. You may leave your order here at the Anderson stores and as quickly as the telegraph can convey the message, flowers will be delivered in any city of the United States from Maine to California and from the Great Lakes to the Gulf of Mexico. This system of floral delivery is more than national—it is international. Suppose you have a friend, a loved one, in London, Copenhagen, Paris, or one of the principal cities in South America. An order placed here will cable prompt delivery of the choicest blooms to just the individual that you desire to reach anywhere in the wide world."

Now if the florists are going to make a big success of "Say It with Flowers" week, they will need to use the newspapers. This ought to be an educational project. HORTICULTURE has long expressed the belief that advertising to be effective should make definite statements which will hold the attention of the readers, giving them something to think about and suggesting to them an opportunity or a want of which they had not already thought. If advertising is worth paying for, it is worth putting considerable thought into.

Probably it is safe to say that there are few Sunday newspapers in the country which would not be willing to publish as a matter of popular interest and without any compensation a well illustrated article dealing with the production of flowers in the particular city where it happens to be published, provided that the material is furnished it. This is one of the best ways to obtain publicity for "Say It with Flowers" week. The newspapers should be given advance notice of the different plans which are to be carried out, such as parades, the distribution of flowers to hospitals, and so on. In addition, though, there should be a special Sunday article. This article might contain information about the number of people engaged in flower growing in the neighborhood, the amount of space devoted to flowers under glass, the numbers of roses, carnations and other cut blooms sent to market daily, and a description of the flower markets themselves. All this would be along the lines of the ordinary special articles which newspapers are glad to obtain. The photographs might show the interiors of some of the large rose or carnation houses, a view in the market in the busiest time, the packing of flowers for shipment, and specimens of the best known roses, 'mums, etc.

Special emphasis is laid upon this feature because while much may be done in other ways which will be reported as current news, the public may not co-ordinate the whole campaign or receive an impetus which will make them flower buyers unless the general features of the whole plan are put before them in the printed word. In the larger cities it may be worth while to appoint a press agent to serve during the week and to see that advantage is taken of every opportunity to bring the value and uses of flowers to the public's attention.

NEW ROSES FOR 1920



FRANK W. DUNLOP (DUNLOP)

The Improved Russell

Dunlop, is a seedling of Russell with Mrs. Shawyer as the pollen parent and combines all the good points of Russell with quick, free growth of Shawyer, so noticeable in Columbia, the other Shawyer offspring.

MADAM BUTTERFLY (HILL)

The Glorified Ophelia

Butterfly, is a glorified sport of the popular Ophelia, and originated with the E. G. Hill Co. It is even freer in growth than its parent and the flower is a glorious combination of pink, apricot and gold.

OWN ROOT STOCK			
QUANTITY	PRICE	QUANTITY	PRICE
100	\$ 35.00	2,500	\$ 725.00
250	82.50	5,000	1,375.00
500	150.00	10,000	2,600.00
1,000	300.00		

GRAFTED

Seven dollars and fifty cents per hundred, additional to own root price. Come and see these varieties growing any time and you will always be welcome.

E. G. HILL CO.
Richmond, Indiana

JOS. H. HILL CO.
Richmond, Indiana

CHARLES H. TOTTY CO., - MADISON, NEW JERSEY

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

Trade Prices on Application

R. & J. FARQUHAR & CO.
BOSTON, MASS.

JUST OUT

BOLGIANO'S 1919 SUMMER AND FALL
CATALOG OF "BIG CROP" SEEDS

Special Prices for
Florists and Market Gardeners.

Write for a copy at once—it will save you
money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.

STUMPP & WALTER CO.

Seeds and Bulbs

30-32 Barclay Street
NEW YORK CITY

SEEDS, BULBS, PLANTS

JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

SEEDS AND BULBS

Boddington's

128 Chambers St., N. Y. City

BOBBINK & ATKINS

NURSEYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's
Fund for Market Development, also "Say
It With Flowers" Publicity Campaign.

GARDEN SEED

BEEF, CARROT, PARSNIP, RADISH and
GARDEN PEA SEED in variety; also other
items of the short crop of this past season
as well as a full line of Garden Seeds, will
be quoted you upon application to

S. D. WOODRUFF & SONS

82 Day St., NEW YORK and ORANGE CONN.

BURNETT BROS.

**Seeds, Bulbs, Plants
Etc.**

92 Chambers St., New York
Write for our Illustrated Catalog

BOSTON FLOWER EXCHANGE.

At the annual meeting of the stock-
holders of the Boston Flower Ex-
change held last Saturday, the entire
board of officers was re-elected. It
was voted to amend the by-laws so
that the annual meeting might be
held anywhere in the city of Boston.

Following the meeting the stock-
holders adjourned to the Parker House
where the annual banquet was held.
Mr. W. C. Stickel presided and read
John Wanamaker's editorial as re-
produced in HORTICULTURE last week.

As usual he made an excellent toast-
master and had a pleasant word for
each speaker whom he introduced. Mr.
Henry Penn dwelt on the value of co-
operation and laid special emphasis on
the opportunities offered to florists by
the coming "Say it with Flowers"
week. Mr. William Elliott paid a
warm tribute to President Wilson and
to the late Theodore Roosevelt. Mr.
G. Thommen when called on spoke
at some length on the labor troubles
in New York City which has interfered
with the publication of the Florists'
Exchange which he represents. He re-
viewed the printing situation and
showed why it is impossible to get out
the Exchange under the present condi-
tions. Mr. William N. Craig was in
his usual happy vein and his remarks
were received with applause. The ta-
bles were decorated with Paper-white
Narcissi, the first seen this season,
which were contributed by W. W. Ed-
gar Co.

"SAY IT WITH FLOWERS."

The Boston florists have decided not
to hold a flower show in connection
with "Say It With Flowers Week," but
a fund is being raised for advertising
in the newspapers and flowers are to
be sent to the hospitals and other in-
stitutions.

MICHELL'S BULBS

HYACINTHS

FIRST SIZE, NAMED—Single and
Double.
SECOND SIZE, NAMED—Single.
THIRD SIZE, NAMED—Single.
UNNAMED—Single and Double.

TULIPS

SINGLE EARLY, DOUBLE EARLY,
COTTAGE GARDEN AND
DARWIN
In Named Varieties and Mixtures

NARCISSI

Single and Double. A Large Variety.

NEW GIANT COLORED FREESIAS

BLUE, LAVENDER, PINK
Per dozen, \$1.25 \$8.00 per 100
Per 1000, \$75.00
MIXED COLORS
Per dozen, 75c. \$5.00 per 100
Per 1000, \$40.00

Write us your requirements on any
of the above, on any other Seasonable
Bulbs. Our Prices are Right.
OUR WHOLESALE PRICE LIST OF
BULBS, SEEDS AND FLORISTS'
SUPPLIES, FREE.

MICHELL'S SEED HOUSE
518 Market St., Philadelphia

W. E. MARSHALL & CO.
SEEDS, PLANTS AND BULBS
Horticultural Sundries
66 W. 23rd St., NEW YORK

THE National Nurseryman

The oldest and best established
journal for nurserymen. Circula-
tion among the trade only. Pub-
lished monthly. Subscription price
\$1.50 per year. Foreign subscrip-
tions, \$2.00 per year. In advance.
Sample copy free upon application
from those in the trade enclosing
their business card.

National Nurseryman Pub. Co., Inc.
HATBORO, PA.

"X" Liquid May Save You Thousands of Dollars in an Emergency

SUPPOSE you suddenly discover that an unusual cold spell has cracked the heating boiler and it leaks badly!

Do you think it necessary to shut off the heat and risk enormous damage to the contents of the greenhouse?

Not at all!

"X" Liquid will repair any leaky or cracked boiler in half an hour. It will do a job that would take two workmen a week.

"X" Liquid Will Do a \$200 Repair Job for \$10

It is not necessary to locate the leaks or cracks or know how many there are.

The action of "X" is entirely automatic. When poured into the boiler it mixes with the water and soon gets to every break in the metal. It flows through strikes the air and then hardens right in the hole. This stops the leak or crack. The heat in the water then sets this repair, making it as PERMANENT and as SURE as any welding job. In fact, where welding won't hold—as on cast-iron section—"X" Liquid makes a perfect repair.

Makes Boilers Rustproof and Scaleproof. Saves Coal

It is a remarkable fact that the same "X" Liquid used for repairing leaks or cracks will also eliminate rust and prevent scale from forming, on the walls.

This means greater heating efficiency with less coal.

"X" contains no cement, powder or other injurious ingredients. It is an absolute liquid, a scientific process for making boilers LEAKPROOF—RUST-PROOF and SCALEPROOF. Beware of inferior imitations which are trading on the reputation of the genuine "X" Liquid.

A Strong Guarantee

You take no chances in using "X" Liquid. It is unconditionally guaranteed to make good. If it fails you get a new can or your money back.

But your greatest guarantee of the value of "X" Liquid is the fact that it is used, sold and recommended by 99 per cent of the manufacturers of boilers and radiators. It is used by the United States Government.

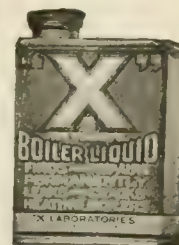
If your boiler cracks or leaks this winter you don't have to worry about your greenery—if you keep "X" Liquid handy. You can do the repair job yourself easily.

1 Quart \$6 in the U. S. A.

2 Quarts \$10 in the U. S. A.

Get "X" Boiler Liquid from your steamfitter—or we will ship direct, postage prepaid, on receipt of price.

**"X" Laboratories, 33 W. 45th St.
NEW YORK CITY**



KEEPING CUT FLOWERS.

The Horticultural Trade Journal of London has the following to say about keeping cut flowers:

Experienced market men know how best to keep flowers left over from one day to another, yet there are some who do not adopt the best methods. Much depends upon what the flowers are, but most flowers will keep better shut up close in boxes, than they will when put into water and exposed. In the ordinary way most flowers will keep longer if the stems are in water, shut up in a close cupboard, which is not very cold or too warm. But in the market there is no such convenience, and from experience I have found that flowers will last longer if shut up in close boxes. In some instances wet paper may be put around the stems, the boxes which should be moist, may be lined with wet paper, and a sheet of dry laid over the wet.

Carnations, sweet peas, and other flowers which curl up quickly, will keep much longer shut up close, than if put into water and the flowers ex-

posed to a dry air. Flowers that turn upwards, such as mignonette, tulips, etc., should where possible be stood upright, instead of being laid down in boxes. It is rather surprising that growers do not adopt the system of packing flowers which turn, in a manner that will prevent it. With most short or medium length stems, there is but little difficulty in packing so that the flowers stand erect, and with some moisture at the bottom of the cases. Moisture is an essential, but it should not come on the flowers.

Some flowers keep better when fully exposed. The Sweet Sultan may be given as an instance; it will last longer fully exposed to the sun, and quite dry, than it will in a moist cool place where there is moisture.

During the past few months I have several times been asked how best flowers can be kept, and it is a difficult question to answer, for so much depends upon what the flowers are, and also the convenience at hand for storing. With few exceptions they will be found to keep better when shut up close in boxes.

I do not know if it is general, but in some of the London florists' shops they have lead-lined drawers for keeping cut flowers in. One florist who has good cellar accommodation tells

me that he can keep flowers under the close archways where there is no draught, for a very long period.

NEW YORK BOTANICAL GARDEN.

An exhibition will be given by the New York Botanical Garden in co-operation with the Horticultural Society of New York on November 8 to 10, at the time of the opening of the new General Display House given to the Botanical Garden by Mr. Daniel Guggenheim and Mr. Murry Guggenheim. The exhibition will be held in this new General Display House which forms part of Range No. 2 on the east side of the grounds. Schedules are now ready for distribution, and may be had by application to the Director-in-Chief, New York Botanical Garden, Bronx Park, New York City.

CHICAGO.

Herman E. Bruns, son of the west side florist and lily of the valley specialist, H. N. Bruns, was married Oct. 18 to Miss Irene Terwilliger. The wedding took place at six o'clock at the Hotel Sherman in the presence of the relatives after which a dinner was served and the happy couple left for the East. Mr. Bruns is associated with his father in business.

Penn
The Florist

"The Telegraph Florist"

Member of Florists' Telegraph Delivery

124 TREMONT ST.

BOSTON

H. F. A. LANGE

Worcester, Mass.

Delivers to all Points in New
England

150,000 Square Feet of Glass

Member Florists' Telegraph Delivery
Association

WORCESTER, MASS.

Randall's Flower Shop

HARRY I. RANDALL, Proprietor.
Member Florists' Telegraph Delivery

Providence, Rhode Island
Johnston Brothers
LEADING FLORISTS
38 Dorrance Street
Member Florists' Telegraph Delivery

Quality and Reliability
WARBURTON

FALL RIVER, MASS.

Deliveries of Flowers and Plants
in FALL RIVER and contiguous
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The Beacon Florist
Beacon Street, **BOSTON**
Near Tremont

J. EISMAN, Manager, 14 years head
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Prompt, Efficient Service Guaranteed.

Zinn
The Florist
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Flowers by Telegraph

Leading Retail Florists Listed by
Towns for Ready Reference. Orders
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here given will be promptly and prop-
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Buffalo, N. Y.—S. A. Anderson, 440 Main St.

Cleveland, O.—J. M. Gasser Co., Euclid Ave.

Cleveland, O.—Adam Graham & Sons, 5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th St.

Cleveland, O.—The Smith & Fetters Co., 735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643 Broadway.

Detroit, Mich.—J. Breitmeyer's Sons, corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017 Grand Ave.

Lawrence, Mass.—A. H. Wagland.

Malden, Mass.—J. Walsh & Son.

New York—David Clarke's Sons, 2139-2141 Broadway.

New York—Dards, N. E. corner 44th St. and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth Ave.

New York—Kottmiller, 426 Madison Ave. and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415 Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad St. at Cumberland.

Providence, R. I.—Johnston Bros., 33 Dorrance St.

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Taunton, Mass. Hall the Florist.

Toronto, Can.—J. H. Dunlop, 8-10 West Adelaide St.

Washington, D. C.—Gude Bros., 1214 F St.

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Worcester, Mass.—H. F. A. Lange.

Worcester, Mass.—Randall's Flower Shop, 22 Pearl St.

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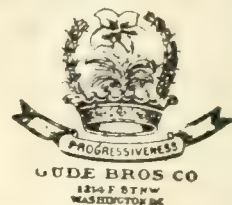
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**Artistic Designs . . .
High Grade Cut Blooms**

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WASHINGTON, D. C.

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Send orders to

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the F. T. D. must be accompanied by
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National Florist for Taunton and Vicinity

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National Capitol

At your service to deliver Flowers or Designs on Order by Telegraph or otherwise. Prompt Reliable Service.

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Connecticut Ave. and L St.
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Nothing Better

785 Fifth Avenue, New York City

"Says It With Flowers"

DARDS FLOWER SERVICE
has spent GUARANTEED SATISFACTION for nearly FIFTY YEARS.
Regular European sailings now established. Let us fill your orders for Steamer Flower Baskets, Corsages and Artistic Boxes of Cut Flowers.

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ANDERSON service means fresh, sturdy Stock and prompt deliveries in BUFFALO, LOCKPORT, NIAGARA FALLS and WESTERN NEW YORK.

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We are well equipped to handle your orders.

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THE SMITH & FETTERS CO.
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CLEVELAND, OHIO
Flowers of Every Kind in Season

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CHAS. H. GRAKELOW F. T. D.
Everything in Flowers
Broad Street at Cumberland

The Park Floral Co.
B. E. GILLIS, President.
E. P. NEIMAN, Secretary.
Member Florists' Telegraph Delivery
DENVER, COLORADO

BARK BEETLES

Any insect boring in the bark might be called a bark borer, but the typical or true bark borers belong to the family of Scolytids and to the group known as snout beetles. There are over 20,000 species of snout beetles but only a few hundred of them are of economic importance.

A bark beetle is a small insect probably never more than a quarter of an inch in length and it may be as small as a sixteenth of an inch. The prevailing color is brown to black. The head is usually doubled under the thorax while the end of the abdomen may have characteristic spines, ridges, or hairs which are the basis of determination of many species.

Most of the bark beetles and borers work between the bark and wood, in the vital tissues of the tree. A few groove the wood while others confine themselves to the inner bark. The greatest injury, of course, is done by those working in or near the cambium layer. An entrance is made by the adult through the bark. This hole is small and often it extends upward thus giving a protection from weather and possibly from other sources. When the bark has been penetrated a vertical transverse tunnel is made along the sides of which the eggs may be placed in niches or the brood chamber may be widened and the eggs packed along the sides. The larvae bore out into the tender tissue following definite lines or extending the tunnels in every direction. As the larvae increase in size the tunnels become wider and if the insects are abundant the flow of sap is checked and the tree or part of it attacked may be girdled in a comparatively short time.

The only sure control is the complete destruction of infested parts. Twigs, branches, or whole trees should be burned or the bark removed and burned immediately or at least before the first of May to prevent the emergence of the adults.

The Davey Tree Expert Company,
W. HOLLISTER, Entomologist

CLEVELAND
A. GRAHAM & SON
5523 Euclid Ave.
Will take good care of your orders
Members of F. T. D. Association.

DAVID CLARKE'S SONS
Deliver orders from any part of the country to
New York City
Write or Telegraph
2139-2141 Broadway, - New York
Telephone 1552-1553 Columbus

KOTTMILLER, Florist
426 Madison Ave. and 49th St., New York. Also Vanderbilt Hotel
Telephone, Murray Hill 783
Out-of-town Orders Solicited. Location Central. Personal Attention.
Member F. T. D. Asso.

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Phones, Prospect 6800-6801-6802
DELIVERIES IN NEW YORK, BROOKLYN and LONG ISLAND

THE J. M. GASSER COMPANY,
CLEVELAND
Euclid Avenue

The Far-Famed Flowers of
TORONTO
Delivered on mail or telegraph order for any occasion, in any part of the Dominion.
JOHN H. DUNLOP
614 West Adelaide St. - TORONTO, ONT.
When writing to advertisers kindly mention HORTICULTURE

BILLBOARDS AND ADVERTISING IN GENERAL

Dear Sir Your editorial note in issue of Oct. 25th seems a direct invitation to speak out about billboard advertising. The question at issue should not be confused. Posters and billboards in certain places may be defensible, but billboard advertising as I believe the phrase generally understood seems to me entirely reprehensible, and should be eliminated by public opinion enacted into such laws as may be, and further exerted in the form of influence. This applies to signs on roofs, fences, etc., and any glaring publicity of the sort along highways and railroads. In some places I hear that organizations encourage refusal of patronage to those who advertise in this way. I can add nothing to Mr. McFarland's good letter on the subject except to touch upon another phase of it, an economic phase.

It is obviously true that our cost of living, now and lately thrusting itself into a foremost position in public attention, is in part due to our increased wants. The luxuries of a previous generation become the natural requirements, if not the real needs, of the present. It is this tremendous rush for things our grandfathers knew not that keeps us employed, in spite of the greater productivity due to better organization and to the use of labor saving machinery—the latter phrase being a misnomer, for no machine is used to save labor but only to produce more. This tremendous output—tremendous compared to former times—must be unloaded on the consumer, and a great aid to this distribution process is advertising. In pushing a new article advertising is often invoked to create a demand where none had existed. This process may of course be entirely salutary and beneficial to the public—but on the contrary it may also be only finally useless because only an encouragement to buy what we were as well or better off not to own. A very large percentage, (is it a third?) of our work is in the production of articles which are by no means among real assistance to "Life, Liberty or the Pursuit of Happiness." Can anyone doubt that to stop this and devote our work more to real needs would effect a reduction in prices? Of course advertising is not wholly to blame for any of this sort of thing—it only helps it along.

Another feature of advertising is important and almost wholly forgotten. It is presumed to increase the volume of sales, thus distributing fixed charges over a greater business, resulting in a smaller percentage of fixed

charges. In other words the supposition is that a purchaser can buy any heavily advertised article at least as cheaply as any other. The answer to this implied question involves other elements, such as a consideration of how large a business can become before certain forms of its organization become entirely top heavy. But still there would remain instances where it would be very interesting to know if an article is costing more because of high fixed charges due to heavy advertising. On the other hand advertising may increase demand so that prices may be raised. In either case the advertising benefits the producer but is paid for by the consumer. Advertising to increase prices is clearly proper, but advertising which by any conditions increases prices is questionable, is it not?

Yours truly,

FRED A. WILSON.

Nahant, Mass.,
October 27, 1919.

MR. RATHGEBER ON DAHLIAS.

At the recent meeting of the American Dahlia Society in New York, Mr. William Rathgeber of New Haven, Conn., made some remarks which excited much attention and comment, but which seem to have been very inadequately reported. For that reason HORTICULTURE wrote Mr. Rathgeber, asking for a statement as to what he said. His letter in reply is as follows:

New Haven, Conn., Oct 7, 1919.

Dear Sir:—Replying to your esteemed favor referring to my remarks at the annual meeting of the American Dahlia Society in New York, I said:

"I wish to take advantage of this opportunity to bring before this society for consideration an evil that is gaining practice and that will mitigate against the popularity of the Dahlia if persisted in. I refer to the over-propagation of new seedlings, resulting in much weakened plants. A grower produces a fine new Dahlia, the second year it improves and he has several plants that produce beauti-

ful blooms in the fall, and is exhibited, taking prizes and certificates. A demand for plants and roots is immediately created, and a good price can be obtained. In order to meet this demand the roots are lifted after the frost and grown on in the greenhouse. As soon as the new sprouts are a few inches long they are cut off above the two lower leaves and rooted. The rooted cuttings as soon as growing nicely are again cut and a new plant made, and so on ad-infinitum. They never produce as good as the original.

"My contention was that it was not fair to the purchaser to sell him this weakened stock. At this point a gentleman interposed saying that if he produced a new flower it belonged to him to do with as he pleased and no society or anyone else should dictate to him, how far he should propagate it. I replied that the gentleman evidently misunderstood my point, and

ALL IMPORTED BULBS

DUTCH—FRENCH—JAPANESE AT TRADE PRICES

Keep your Counter Display Alive

Nothing Better than Bulbs and None Better than Ours

Moderate cost. Big Profits. No Loss

Tulips, Hyacinths, Narcissus

Finest in Cultivation

Write for "Book for Florists"

43 Barclay St.
New York City

Vaughan's Seed Store

33 W. Randolph St.
Chicago, Ill.

MASTER BRAND CONCENTRATED MANURE!

Greenhouse and Garden Fertilizers. Write us for detailed information and prices on

**High Grade Concentrated
Sheep Manure**

and our

Vine and Plant Manures

PROTO FEED & GUANO CO.

4121 S. La Salle St.

CHICAGO

FOR IMMEDIATE DELIVERY

Lilium Giganteum

Pulverized Sheep Manure
Fertilizers for the Greenhouse

JOSEPH BRECK & SONS

(CORP.)

SEEDS BULBS PLANTS

51 North Market Street

Boston, Mass.

that I simply wished to show that this practice would soon depreciate the value and popularity of the flower.

President Vincent then fully backed me up in my contention that it was bad practice, and that it would retard rather than advance Dahlias to a higher state of perfection."

Yours very truly,

WM. J. RATHGEBER.

A REMARKABLE ASIATIC TREE.

Zelkova serrata, the Keaki of the Japanese, is an Asiatic tree which is still too little known in the United States. The oldest tree in this country is growing on the estate of Mr. Henry Everett in Barnstable, Mass. The seeds which produced this tree were brought from Japan in 1862 by John Wilson, who gave them to Captain Frank Hinckley. Only one plant was raised from these seeds. It is now a broad-headed tree with a short, stout trunk divided into several large ascending stems. A little later seeds of the Keaki were sent from Japan to the Parsons nursery at Flushing, either by Dr. Hall or by Mr. Thomas Hogg, and the best of the trees, the result of this introduction, known to the Arboretum are in Dr. Hall's plantation in Bristol, Rhode Island. The largest of these

trees are now fully seventy feet high with tall stems from two to two and a half feet in diameter. These trees have for years been producing large crops of seeds and quantities of seedlings spring up under the trees, and at long distances from them, the seeds being widely scattered by the wind.

A specimen with a tall clean stem and shapely head which has been planted by the roadside in Warren, the next town to Bristol, indicates that the Japanese Zelkova might be successfully used as a street or roadside tree. It is as a timber tree, however, that this Zelkova deserves the attention of Americans. It is the most important hardwood tree of Japan and Korea. The wood is tough, elastic and durable in the ground and when exposed to the air. It is considered the best wood for building in the Empire, and furnishes the great round columns which support the roofs of Japanese temples. It is universally used in Japan in making jinrikishas, and quantities of the wood are sent from Korea into China for this purpose. The Keaki alone has made the jinrikisha possible just as the Hickory-tree has made possible in this country the light wagon and the trotting horse.

The demand for the wood has made

the Keaki comparatively rare. That it was once a noble tree, however, is shown by the great specimens which have been preserved in temple gardens and by village roadsides. Such trees are often at best one hundred feet high with the trunks eight or ten feet in diameter.—*Arnold Arboretum Bulletin.*

PATENTS GRANTED.

Copies of any one of these patents can be obtained by sending fifteen cents in stamps to Siggers and Siggers, Patent Attorneys, Box No. 9, National Union Building, Washington, D. C., and mentioning *HORTICULTURE*.
1,317,169. Harrow. Wm. O. Long, Mansfield, Ohio.

1,317,282. Control systems. Ralph E. Ferris, Swissvale, Pa.

1,317,402. Cultivator and covering attachment for corn planters. Edwin Taylor, Edwardsville, Kans.

1,317,533. Cultivator. Utley Wedge, Ardmore, Pa.

1,317,569. Flower pot. Joseph Forster, Patchogue, N. Y.

1,317,601. Grader and ditcher. Wm. A. Steele, Owensboro, Ky.

1,317,739. Agricultural machine. Samuel H. Tinsman, Morris, Ill.

1,317,764. Cultivator. Silas P. Taylor, Loretto, Tenn.

BOSTON FLORAL SUPPLY COMPANY

Wholesale Florists

DEALERS IN

Cut Flowers and Evergreens

We manufacture our Baskets, Wax flowers, Wax designs, Wire frames, etc., and preserve our Cycas Leaves right in our own factory.

Office, Salesrooms, Shipping Dept.

15 Otis St. 96 Arch St.
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Telephones, Main 2574, 3525

For All Flowers in Season Call on

THE LEO NIESSEN CO.

1201 Race St. Philadelphia, Pa.

EDWARD REID

WHOLESALE FLORIST

1619-21 Ranstead St., Philadelphia, Pa.

CHOICE BEAUTIES, ORCHIDS, VALLEY, ROSES
and all Seasonable Varieties of Cut Flowers

Wired Toothpicks

Manufactured by

W. J. COWEE, Berlin N. Y.

10,000...\$2.25 50,000...\$9.75 Sample free.
For Sale by Dealers

GEORGE B. HART

WHOLESALE FLORIST

24 Stone St., Rochester, N. Y.

CUT FLOWER BOXES

EDWARDS FOLDING BOX CO
MANUFACTURERS
PHILADELPHIA, PA.

CONNECTICUT HORTICULTURAL SOCIETY.

It was voted at the last meeting to award three premiums: a first, a second and a third for both professionals and amateurs. These prizes are for the exhibitor who wins the most certificates during the year. Many exhibits are staged at the meetings of the society during the year, and it is for the purpose of creating more rivalry between the members that the plan above mentioned is inaugurated.

Suggestions from the secretaries of other societies as to methods employed to interest lovers of gardens and flowers to attend the meetings will be very much appreciated by the secretary of the Connecticut Horticultural society.

The date of our next meeting is October 24th, Friday.

ALFRED DIXON, Secy.

PATENTS GRANTED.

Copies of any one of these patents can be obtained by sending fifteen cents in stamps to Siggers & Siggers, patent attorneys, Box No. 9, 918 F. St. N. W., Washington, D. C., by mentioning HORTICULTURE:

- 1,318,365. Planter-Shoe. Charles H. Erway, Turlock, Calif.
- 1,318,419. Gage-Runner for Planters. Solve S. Vathing and Edward O. Laugen, Houston, Minn.
- 1,318,561. Double-Drag. Thomas F. Hudson, North English, Iowa.
- 1,318,577. Attachment for Garden and Lawn Rakes. Peter Moquist, Minneapolis, Minn.
- 1,318,578. Hand-Driven Implement for Garden and Field Use. Horace Mote, Poulton-le-Fylde, England.
- 1,318,582. Cultivator. Wesley A. Paul, Moline, Ill., assignor to Deere & Co., Moline, Ill.



The Meyer Florists' Green Thread is different from any other make. Every spool contains 2 ounces of actual thread, 16 ounces to a pound. See that you get the Meyer Florists' Green Thread and you will get the very best thread in the world. Don't take any substitutes.

Manufactured by

John C. Meyer Thread Co.

BOSTON, MASS. Mills at Lowell, Mass.

H. E. FROMENT

Wholesale Commission Florist
Choice Cut Flowers

New Address, 148 West 28th St., NEW YORK
Telephones: 2200, 2201, Madison Square.

WM. P. FORD

Wholesale Florist

107 W. 28th Street, NEW YORK

Telephone 5335, Farragut.

Call and inspect the Best Establishment in the Wholesale Flower District.

WALTER F. SHERIDAN

Wholesale Commission Dealer in

CHOICE CUT FLOWERS

133 West 28th Street, New York

Telephones—4634-5638 Madison Square

E. G. HILL CO.

Wholesale Florists

RICHMOND, IND.

Please mention Horticulture when writing.

REED & KELLER

122 West 25th St., New York

Florists' Supplies

We manufacture all our Metal Designs, Baskets, Wire Work & Novelties and are dealers in Decorative Glassware, Growers and Florists' Requisites

THE KERVAN CO

Fresh Cut Decorative Evergreens.

Highest Standard of Quality. Largest Stock in America. Write for Illustrated Catalog of Greens and Florists' Supplies
119 W. 28th St., - - NEW YORK

WILLIAM H. KUEBLER

Brooklyn's Foremost and Best

WHOLESALE COMMISSION HOUSE

* First Class Market for CUT FLOWERS

Willoughby St. Brooklyn

WE WANT MORE SHIPPERS

We have a numerous clientele of New York City buyers and the demand exceeds our supply. This is especially true of Roses. We have every facility and abundant means and best returns are assured for stock consigned to us.

Address Your Shipments to

UNITED CUT FLOWER CO., INC.

111 W. 28th St., New York

D. J. Pappas, Pres.

HENTZ & NASH, Inc.

Wholesale Commission Florists

55 and 57 West 26th Street

Telephone No. 755 NEW YORK
Farragut

TARTARIAN ASTERS.

Yellow leaves are drifting through the air under a sombre gray sky, a few last roses of summer are still lingering on their bushes. Frost has blackened the dahlias. The garden is going to sleep for the winter and will soon be tucked under its covering of good brown earth and leaves. But the flowers have not all gone. Pansies and violas are still bringing up their thoughts and stretching high above the brown soil are the beautiful Tartarian asters, lifting their mauve and yellow blossoms six or seven feet in air.

A dozen plants which were planted three or four years ago by the wood road at Hillcrest have multiplied so that we now have them between two boulders in the wild garden and also on the wood road where they grow in half shade and will we hope hold their blossoms till November.

A good illustration of these asters was given in a former number of *Addisonia*, which has such beautiful pictures of the flowers growing in the Botanical Gardens in Bronx Park.

M. R. CASE.

Hillcrest Farm, Weston, Mass.

SHOW TO BE HELD AT ARDMORE.

The Pennsylvania Horticultural Society has been unable to secure a hall in Philadelphia in which to hold the Annual Exhibition and Chrysanthemum Show. It has therefore been decided to hold the exhibition in Masonic Hall, Ardmore, Penn., on November 4 and 5.

All plants are to be delivered at Masonic Hall on Monday, November 3, and must be placed in position before 6 p. m.

Cut flowers of chrysanthemums are to be staged on Tuesday morning, November 4, before 12 noon.

Fruits and vegetables are to be staged Tuesday afternoon, November 4, by 6 p. m.

Cut flowers of roses, carnations and sweet peas, are to be staged on Wednesday morning, November 5th, before 12 noon.

All entries must be received at the office of the society, 606 Finance Building, Philadelphia, by 12 noon, on Saturday, November 1st. This rule will be strictly adhered to, as the committee of arrangements will have limited space to work with, and cannot change their plan of staging exhibits, after it has been adopted.

DAVID RUST, Secy.

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

**IF You Want Anything from Boston Get It
From Henry M. Robinson & Co.**

For Safety Place Your Orders With Us

HENRY M. ROBINSON & CO.
2 Winthrop Square and 32 Otis Street, BOSTON, MASS.

B. A. SNYDER CO. *Wholesale Florists...*

Hardy Cut Evergreens, Cut Flowers and Florists Supplies

21-25 Otis Street, BOSTON, MASS.

Telephone Fort Hill 1083-1084-1085

WILLIAM F. KASTING CO.
Wholesale Florists

568-570 WASHINGTON STREET - BUFFALO, N. Y.

New England Florist Supply Co.

276 Devonshire Street,

BOSTON, MASS.

Telephones, Fort Hill, 3469 and 3135

**MICHIGAN CUT FLOWER
EXCHANGE, Inc.**

WHOLESALE COMMISSION FLORISTS

Consignments Solicited

Hardy Fancy Fern Our Specialty

264 RANDOLPH ST., DETROIT, MICH.

The House for Quality and Service

ZECH & MANN

*We are Wholesale Florists Doing
a Strictly Wholesale Business*

30 East Randolph Street, CHICAGO

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc. can be sold through this medium.

Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you.

DREER'S

FLORIST SPECIALTIES
New Brand New Style
"RIVERTON" HOSE

Furnished lengths up to 500 ft. without seam or joint.

The HOSE for the FLORIST
3/4-inch, per ft., 10 c.
Reel of 500 ft. " 18 3/4 c.
2 Reels, 1000 ft. " 18 c.
3/4-inch, " 16 c.
Reels, 500 ft., " 15 1/2 c.
Couplings furnished without charge

HENRY A. DREER
714-716 Chestnut St.,
PHILADELPHIA, PA.



NEWS AND COMMENTS

BOSTON.

Penn certainly understands the art of publicity and particularly the value of window displays. He had all the papers writing up his window wedding last week. The following was the Globe's story:

The sight of seven attractive little girls, with the utmost dignity, taking part in a marriage ceremony drew crowds of passers-by this afternoon to the windows of Penn the Florist on Tremont street. The window itself had been decked in bridal array, with flowers, greenery and white ribbons, and as a favor to Mr. Penn, who has long been a friend to the Stage Children of New England, seven children members of the organization came and two of them gravely stood up before a third, who put on ministerial dignity, while others acted as bridesmaids, ring-bearer and flower girl.

The pantomime marriage was under the direction of Mrs. Mabel Lyman, directress of the Stage Children of New England, and it was followed by a reception, as every marriage should be, held in the flower shop itself, at which the ("newly weds") and their attendants stood in line. Among the interested spectators was a woman who had two little children with her. They stood entranced and delighted, fulfilling the educational purpose of the exhibit."

Among the new incorporations is the following: R. & J. Farquhar Company, Boston, seeds; capital, \$500,000; incorporators, James F. M. Farquhar, John K. M. L. Farquhar and George Cruickshank of Boston, Victor E. Nilsson of Winthrop and Alexander P. Dewar of Dedham.

The annual chrysanthemum show of the Massachusetts Horticultural Show will be held Saturday and Sunday of next week.

Mr. Richards, the well known florist of Greenfield, has been a recent visitor in the market.

Mr. Futterman of New York has been among the week's visitors.

H. Cameron of North Cambridge is cutting the new "mum" Whitney which is meeting high favor in the market, being considered as good a white flower as any shown.

Martin Wax is being congratulated on his catch of a 12-pound trout which he caught at Grand Lake, Me. The big fish is displayed in the window of Dame, Stoddard & Kendall.

NEW YORK STATE.

George E. Pegg is building another large greenhouse on his property at Cherry Valley.

Extensive plans are under way by the members of the Albany Florists' Club for the observance of "Say It With Flowers" week. All florists' shops throughout the city will be specially decorated for this week and it is planned to have a large auto flower float which will tour the city to inform the public of the observance of this week. The committee in charge of the affair consists of Fred A. Danker, chairman; Thomas Tracey, treasurer; and Robert Davison, secretary.

The Albany club is also making preparations for the annual chrysanthemum show which will take place Thursday evening, November 20, in the rooms of the Albany Cut Flower Exchange, 611-613 Broadway; and which will be open to the public. Those in charge of the show which will include all varieties of chrysanthemums as well as other flowers are William Newport, Edward B. Tracey, Fred A. Danker and Byron Holmes.

Carr W. Peck, for the past 11 years proprietor of the Grove street greenhouses at Oneonta, sold the entire plant, including residence, offices, greenhouses and the going business to Ralph S. Wyckoff. Immediate possession was given, and the business will be continued under the name which for more than 38 years it has borne.

While, as above stated, the new proprietor is in possession, Mr. and Mrs. Peck will remain for some time, probably until December 1, for the purpose of familiarizing the new management with the details of the business. The Grove Street greenhouses are among the oldest of Oneonta business institutions, having been established by Mrs. S. Scott in 1881. At the close of a quarter of a century she sold the business to C. E. Miles, and three years afterwards the property was acquired by Mr. Peck, who has most successfully continued the enterprise to the present time.

D. M. Edwards has purchased the greenhouse and business of the Baker Floral Company at Onondaga Valley, according to C. Hinsdell Baker, head of the company. The property includes about five acres of land. The purchase price is said to have been about \$35,000. It is expected that the flowers will be sold through the floral department of the

E. W. Edwards & Son stores in Syracuse and Rochester.

William Clemmonson, for many years florist of the Saratoga Springs Race Track Association, died recently at his home, 16 William street, Glenn's Falls. He was 57 years old. He had resided in this city about a year.

NEW JERSEY.

Nicholas J. Goeller, the well known florist who recently acquired the valuable property at the corner of Hamilton and Olden avenues, Trenton, is planning to make extensive improvements.

NEW ENGLAND.

The E. & C. Woodman Greenhouse property in Holten street, Danvers, Mass., which has been idle for some time, since the death of the former owner, has been sold to a house-wrecking concern which will raze the buildings and subdivide the land into houselots.

Joseph W. Willis, florist, of Ansonia, Conn., is building an addition to his greenhouse.

The Florists' Club of Hartford has voted not to hold a show this Fall.

F. C. Willard, formerly of Taunton, is busy erecting his range of greenhouses at Raynham, to which place he has moved. Already he has some of the work completed and stock under glass.

Hall the Florist, of Taunton, now located in the former Rose establishment, has been doing a lot of wedding work.

W. W. Hathaway, of Brockton, attended the Buffalo Convention of the F. T. D. He has a large store and is doing an excellent business.

Mr. C. Titus, of Marblehead, claims to have grown and flowered 2,000 varieties of dahlias the past season.

Larcom & Smith, of Beverly, have had some very attractive windows of late. They also have a very neat store.

A. K. Choate, of Beverly, has been laying new hardwood floors in his store and in his display windows.

Aiken the Florist, of Springfield, has been making effective use of oak leaves and colored berries for window decorations.

PHILADELPHIA.

The growers have commenced pinching their Beauty roses for the holiday crop so that the supply at present is on the short side but the quality re-

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Kroeschell Bros. Co., 466 W. Erie St.
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mains very good and prices steady. Columbia coming strong and leading the procession in the Russell, Premier class. Killarneys seem to have taken a back seat this year. Many growers have stopped producing these and are devoting their space to other varieties which indicates the passing of another old favorite in a few years. Ophelia holds its own well and is coming along in good shape. Chrysanthemums are about as big a factor now as the roses and the list has been increased by some new comers, among these being the Chas. Turner, Tiger and Richmond. Rather too many of the outdoor pom pons coming along for the demand. Carnations are fairly plentiful and the quality is still on the upward trend. Orchids rather shy, and the market here has had to go considerably afield to fill some orders. Weather being still mild plenty dahlias, cosmos and other outdoor subjects. The outdoor men must be using the right kind of language in their prayers. What?

OBITUARY

Albert A. Spear.

Albert A. Spear of East Weymouth, for 40 years a well known and successful florist of the South Shore, died last week, aged 76 years.

He was a native and life-long resident of Weymouth. When a young boy he learned the trade of a wheelwright and carriage builder. He continued in this business until he was 20 years old and then established a shop of his own. About 40 years ago he discontinued this business and became a florist, and the plant today is an extensive one. He was a veteran of the Civil War.

He is survived by his wife, daughter and two sons.

Robert Johnston.

It is with deep regret that we have to record the death of our beloved friend, Robert Johnston, a gardener of

great ability and a thorough gentleman in every sense of the word.

After receiving his early training in Scotland and England, Mr. Johnston came to America in 1889, going to Lenox where he was for a number of years with the late John E. Parson, later with Mrs. J. B. Crane; going from there to Newport, R. I., he was there for a number of years on the French estate, coming back to Massachusetts again over twenty years ago, where he has remained ever since. For the last number of years he has been identified with R. & J. Farquhar & Co., in their landscape department where he made a host of friends, by his genial manner, sympathetic nature and his willingness to do his utmost to be of service, not only to his employers, but to all whom he came in contact with.

Mr. Johnston leaves a wife and two daughters, who have the sympathy of his wide circle of friends in their hour of sorrow.

WHOLESALE FLOWER MARKETS—TRADE PRICES—Per 100 TO DEALERS ONLY

	BOSTON Oct. 27	NEW YORK Oct. 27	PHILA. Oct. 27	CINC'I. Oct. 27	CHICAGO Oct. 27	PITTSBURG Oct. 27	BUFFALO Oct. 27
Roses							
Am. Beauty	8.00 to 40.00	2.00 to 40.00	15.00 to 50.00	10.00 to 50.00	15.00 to 50.00	25.00 to 50.00	5.00 to 50.00
Hadley	3.00 to 20.00	4.00 to 20.00	8.00 to 15.00	8.00 to 20.00	4.00 to 15.00	4.00 to 15.00	..... to
Hoosier Beauty	3.00 to 15.00	..... to	4.00 to 10.00	5.00 to 15.00	4.00 to 15.00	..... to .....	..... to
Killarney	2.00 to 10.00	1.00 to 5.00	3.00 to 8.00	5.00 to 12.00	4.00 to 12.00	1.00 to 18.00	..... to
White Killarney	2.00 to 50.00	2.00 to 5.00	3.00 to 8.00	5.00 to 12.00	4.00 to 12.00	4.00 to 12.00	..... to
Mrs. Aaron Ward	2.00 to 12.00	3.00 to 6.00	4.00 to 6.00	5.00 to 10.00	4.00 to 12.00	4.00 to 10.00	..... to
Mrs. Chas. Russell	4.00 to 16.00	2.00 to 15.00	10.00 to 30.00	6.00 to 20.00	6.00 to 25.00	8.00 to 30.00	..... to
Mr. Geo. Sawyer	2.00 to 12.00	1.00 to 4.00	..... to	6.00 to 20.00	4.00 to 12.00	..... to .....	..... to
Columbia	2.00 to 12.00	2.00 to 8.00	10.00 to 25.00	6.00 to 25.00	5.00 to 25.00	6.00 to 15.00	..... to
Maryland	1.50 to 10.00	2.00 to 12.00	3.00 to 8.00	6.00 to 12.00	4.00 to 12.00	4.00 to 12.00	..... to
Ophelia	2.00 to 15.00	2.00 to 12.00	3.00 to 10.00	5.00 to 15.00	4.00 to 15.00	4.00 to 18.00	..... to
Adiantum	.75 to 2.00	..... to	1.00 to 1.50	1.00 to 1.50	..... to	1.00 to 2.00	..... to
Asparagus plum (100 bchs apren)	.15 to .50	..... to .....	..... to	25.00 to 50.00	25.00 to 30.00	40.00 to 50.00	..... to
Asters	.25 to .50	..... to .....	..... to	25.00 to 35.00	.50 to 1.50	60.00 to 75.00	..... to
Bonaffon	.50 to 1.00	.50 to 2.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Calendulas	1.50 to 6.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Carnations	2.00 to 4.00	..... to	2.00 to 3.00	2.00 to 4.00	2.00 to 6.00	..... to .....	..... to
Chrysanthemums	1.50 to 4.00	1.00 to 3.00	3.00 to 4.00	3.00 to 8.00	3.00 to 6.00	3.00 to 4.00	..... to
Ferns, Hardy	.50 to 4.00	3.00 to 4.00	10.00 to 40.00	10.00 to 35.00	15.00 to 40.00	17.00 to 50.00	8.00 to 40.00
Galax leaves	1.50 to 2.00	..... to	25.00 to 50.00	..... to 20.00	.29 to .30	.25 to .....	..... to
Gladioli	..... to 2.00	..... to	10.00 to 15.00	..... to 15.00	.15 to .20	.20 to .....	..... to
Lilies Rubrum	4.00 to 5.00	4.00 to 8.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Orchids Cattleyas	..... to .....	..... to	6.00 to 8.00	..... to .....	..... to .....	..... to .....	..... to
Orchids Cypripediums	75.00 to 125.00	25.00 to 75.00	50.00 to 100.00	..... to	12.00 to 15.00	100.00 to .....	..... to
Smilax	..... to 1.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Sweet Peas	..... to .....	..... to .....	..... to	15.00 to 20.00	20.00 to 25.00	23.00 to .....	..... to
Snap Dragon	2.00 to 3.00	1.00 to 3.00	2.00 to 4.00	1.50 to 2.00	2.50 to 3.00	..... to	1.00 to 2.00
Violets	.75 to 1.50	..... to	4.00 to 10.00	4.00 to 6.00	..... to .....	..... to	4.00 to 6.00
	.60 to .75	..... to .....	.75 to 1.00	..... to .....	.25 to 1.00	..... to .....	.75 to 1.00

THE GARDENER'S SECTION

JUDGING FLOWER SHOWS

Philadelphia, Oct. 20, 1919.

Dear Sir:—In your October 4th issue, page 295, is a splendid article from Canadian Florist, on "How Flower Exhibitions are Judged." I personally wish that these rules and instructions might be distributed among our many good amateurs, who are eclipsing the efforts of our commercial and private gardens. A few years ago, it was common in the experience of the writer, to see a well set up show, with fine specimens, carelessly arranged and no attention in putting on exhibition the required amount of specimens to be judged. If six was the number required, seven or eight would be no objection. After they found the reason for being disqualified they soon obeyed the rules, and took the medicine good naturedly. Now it is with great pleasure that I can report the Horticultural societies within my knowledge, and where I have the honor to officiate, to be as rigid and obedient to the rules as the professional exhibitor. These societies are now in the forefront with quality and unique designs far exceeding even the expert and the lady members of these societies are as active as the men.

Another important rule of these exhibitions is the fact that the amateurs and professionals are classified even to the extent of the private estate exhibiting plants, flowers, fruits and vegetables grown by a gardener, against the amateur exhibitor growing the exhibit themselves. It is a pleasure to find the annual exhibitions improving with time and skill. This improvement is so pronounced that the commercial exhibitor seldom enters for contest or even exhibition.

There is good reason, after considering the fact that in Dahlias especially, one would not expect to be able to go through a field of several acres and cut specimens from stock grown for roots for market, such as he would find in a private garden where perhaps 25 to 50 plants of prize sorts are grown by amateurs who care for each individual plant by staking, feeding, and disbudding, in order to produce a few extra fine specimens.

The Flower Show at Collingswood, N. J., October 3 and 4th, was pronounced the best exhibition of Dahlias shown in this country and they were certainly the largest flowers and of better quality than have often ever greeted the eyes of the judges, who were men who know Dahlias and had

attended recent and previous shows in the leading cities. This society has been training for a number of years, growing prize flowers, and holding shows at Rose and Dahlia time. The close adherence to rules governing exhibitions, has given each member a better knowledge of what a prize flower should be; therefore, there was perfect satisfaction at the judges decision, in both flowers and vegetables. A feature practiced by this Society is the exhibition of canned fruits and vegetables. This department is entirely under control of the lady members, who select their judges. This branch of the exhibition has become a strong feature, which has enhanced the interest in that household necessity very much.

Another commendable feature at all local exhibitions of flowers, is the fact that a committee of ladies is usually appointed to judge floral designs and table decorations. Many new and novel designs are introduced. These the ladies are particularly capable of judging.

J. OTTO THILOW.

MINIATURE WILD GARDENS.

In visiting the flower shows of Japan one sees many pretty little toy gardens in which the round bridges, tiny ponds, temples and generally their sacred mountain of Fujiyama are represented.

Last May when the schedule of the Massachusetts Horticultural Society called for a display of wild flowers we decided at Hillcrest to see what could be done with a miniature wild garden in New England. So I suggested to Mr. Allen, our gardener, that he should get a few rocks and seedling pines and see what he could do. The board on which this garden was planted was twenty-seven inches wide and three feet deep. It showed a clump of pink moccasin flowers or cypripedium acaule, five or six varieties of violets, the little pink catchfly or *Silene pennsylvanica*, and more than twenty other wild flowers. The flowers were all labelled on small strips of gray paper which harmonized with the rocks.

This little garden attracted so much interest in Horticultural Hall and later in the Children's Museum in Jamaica Plain, where it was sent when the show was over and where its flowers kept in bloom for several weeks, that it was decided to do something of a more extensive nature at the exhibition in Horticultural Hall next May.

At first a garden of wild flowers in the small hall was considered. But it was decided that to make such a garden would be too expensive besides making a clutter of earth and rocks. It was then decided to offer prizes for small gardens planted on boards three feet long by two and a half feet deep to be made at home and brought to the hall. All the flowering used should be correctly labelled. It is believed that such gardens will call attention to the beauty of our wild flora of New England and add a gist to the interest already taken in it.

M. R. CASE.

Hillcrest Farm, Weston, Mass.

October 26th, 1919.

THE WESTCHESTER AND FAIRFIELD HORTICULTURAL SOCIETY.

One of the greatest nights in the history of this society was held in Hubbard's Hall, Greenwich, Conn., Friday evening, October 10. The occasion was the welcoming home of the boys that fought and won. Pres. Graham in a few very choice and touching words introduced the warriors. After the regular business of the society was gone through President Graham called on John Troy of New Rochelle to act as toastmaster. Mr. Troy spoke on the crisis that we have come through and the present labor unrest, and in a few very appropriate words presented each of our soldier members with a book entitled "What Great Britain Can Teach Us About Gardening," which was gracefully accepted by each of the recipients. Fred Fremms and Alex Clarkson described their thrilling experience on the battlefields and thanked the society for the cigars and tobacco which they received a few days before going into action, sandwiches and refreshments were served. With Wesley Thomas at the piano some very good violin solos were given by Messrs. Wilson, Mitchell, Stuart and Sutherland. Songs were sung by Mitchell, Jones, Lee, Collins, and some very good orations were given by Mr. Goodband of Tarrytown, James Foster, P. W. Popp, W. Connine and Bill Collins of Boston. There was a very good exhibition of flowers, fruit and vegetables. James Foster won first prize for the collection of vegetables James Stuart, James Linane and Robert Williamson received cultural certificates for some very fine exhibits Mr. Troy

JACK CONNOR, Cor. Secy.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

I have noticed an interesting tendency among dahlia growers which is to concentrate their attention on flowers of one or two types. Of course this is not the case with men or women who grow dahlias in a large way, but is confined more to small gardeners. One man in Brockton, Mass., though, who specializes on decorative dahlias grows enough so that he sells a considerable number of bulbs every year, and in this connection it may be said that all over the country there are dahlia enthusiasts now who plan to sell a sufficient number of tubers each year to make their hobby pay its way. They are usually

successful, for there seems to be no end to the demand for dahlias. The extent of this demand may be indicated by the fact that one grower in New England is storing this season fifty thousand roots of one variety alone, Stradella, a variety much in demand. This same man is putting in almost as many roots of another variety, and altogether will have several million tubers in storage.

This is getting away, though, from my original line of thought about the tendency to specialize on certain types. This tendency has come along coincidentally with the growing popularity of the varieties which have departed al-

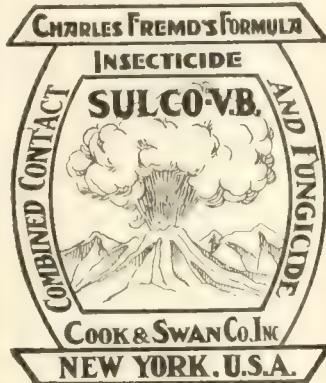
most wholly from the original dahlia type, the chub-faced dahlia of which Maeterlinck wrote in humorous derision. I think the time is coming when there will be gardens filled almost entirely with collarette dahlias, single dahlias, duplex dahlias and paeony-flowered dahlias. Of course the decorative dahlia stands high in popularity because of its value for cutting, and the cactus dahlia in its many forms is a fascinating flower.

The paeony-flowered dahlia, though, has a charm all its own, and some varieties make even the rose lover waver for a moment in his loyalty to the queen of the flowers. It is regrettable that some of the best of the paeony-flowered varieties are very difficult to winter. This applies to Geisha, one of the most sensational dahlias ever put out, and one which every amateur craves for his collection. There are few dahlias which are more certain



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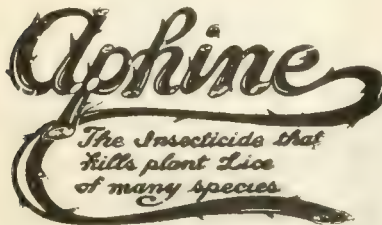
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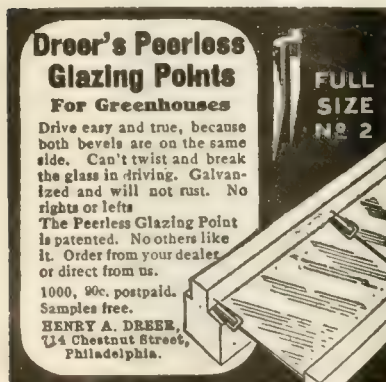
to come out of the cellar in the spring a soft, pulpy mass, quite useless for planting. It keeps well enough until March and then goes by the board unless given very careful treatment. The collarette and single dahlias make an appeal to flower growers who have never cared for the older types, and I believe that they are going to have a great run of popularity when the varieties become more numerous.

In looking over the little catalog issued by F. H. Horsford, of Charlotte, Vt., I have been interested to note that he gives considerable space to several lilies which are rare and not listed by the average nurseryman. Certainly Mr. Horsford is to be congratulated on having so good a stock of lilies. In the list is *L. Wilmottiae*, the Chinese lily which was discovered, named and introduced by Ernest H. Wilson. Mr. Wilson discovered it in the Province of Hupeh and was much impressed with it from the first. It was named in honor of Miss Ellen Wilmott, an English amateur of prominence whose name has also been affixed to several other good plants.

In form the flowers are similar to those of *speciosum* but are much smaller. The color is apricot yellow spotted with brown, as near as it can be described. In point of fact, no one can get a proper conception of the beautiful shades which this lily has without seeing it. *L. Wilmottiae* is exceedingly free flowering. Mr. Horsford says that as many as twenty-eight blooms have been counted on one stalk at his place. It also has the advantage of blooming over a long season, as all the flowers do not open at the same time.

There seems to be no doubt that this lily is absolutely hardy even in northern New England. It has been grown with success by William Anderson, superintendent of the Bayard Thayer estate at Lancaster, Mass. Indeed, he was the first man to show it in bloom in this country, making an exhibit at Horticultural Hall, Boston, in 1916, on which occasion it was awarded a silver medal by the society.

Mr. Horsford also has *L. Sargentiae*, the beautiful lily which Mr. Wilson discovered in Tibet. This is another lily the stock of which is very scarce but which is wonderfully handsome, being taller than the better known Regal lily and having a cluster of flowers at the top. The flowers are white with a chocolate shading outside. It's a fine plant but possibly not quite so hardy as *L. Wilmottiae*. In any event it insists upon having a well drained soil if it is to thrive, being especially impatient of too much moisture in winter.



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WANTED a working foreman. Must be a good grower of all potted plants, cut flowers and roses, with some experience in making up. Wages \$35.00 per week. Located 150 miles east of Boston. Only a man of ability and a worker need apply. First class references required. Address "O. M. P.," care **HORTICULTURE**.

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Costs only 90c. per Week
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It would keep your name and your specialty before the whole trade.
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MR. GREENHOUSE OWNER:

Have you ever given careful consideration to the cost of your fall repair work? If not, now is the time to make preparations for reducing this cost. Our line of Greenhouse Fittings will be found just the thing for practically all of the work which you intend to do. Write for descriptive catalog on Sash Operating Device and Greenhouse Fittings. It will repay you many times. Write today.

ADVANCE CO., Richmond, Ind



DUTCH AND OTHER BULBS

Of the following offered stock the DUTCH BULBS can be shipped at once—the others as they arrive. All prices are understood packed and F. O. B. cars or steamer New York.

U. S. GROWN BULBS

NARCISSUS EMPEROR, double nosed, XXX.....	\$36.00 per 1,000
NARCISSUS EMPRESS, double nosed, XXX.....	36.00 "
In lots of 10,000 or more, both varieties.....	35.00 "

October delivery. These are large bulbs selected for forcing.

VALLEY PIPS

VALLEY PIPS, Holland grown, selected for forcing.....	\$18.00 per 1,000
---	-------------------

November delivery. Case lots only. Cases contain 2,500 pips.

DUTCH BULBS

"D. N." means double nosed. Tulips are sold only in multiples of 250, Hyacinths in multiples of 50, Miniature Hyacinths in multiples of 100—as they come that way in bags we cannot break bags.

SINGLE EARLY TULIPS

Rose Gris de Lin	\$24.00 per 1,000	Vermillion Brilliant	\$47.50 per 1,000
Yellow Prince	32.00 "	Prosperine	46.75 "
White Swan (True).....	30.00 "	Mon Tresor	46.75 "
White Hawk	30.00 "	Coleur Cardinal	48.50 "
Duchess de Parma.....	30.00 "	Flamingo	50.00 "
Prince of Austria	35.00 "		

DOUBLE EARLY TULIPS

Snow Ball	\$24.00 per 1,000	Couronne d'Or	\$47.00 per 1,000
Murillo	30.00 "	Imperatur Rubrorum	50.00 "

DARWIN TULIPS

La Candeur	\$26.00 per 1,000	Gretchen	\$29.00 per 1,000
Glow	37.00 "	Baron de la Tochnaye.....	25.25 "
Madam Krelage	33.00 "	Suzon	30.00 "
Erguste	33.00 "	Rev. H. Ewbank	30.00 "
Massachusetts	31.00 "	William Copeland	59.00 "

NARCISSUS

Empress (D. N.)	\$42.50 per 1,000	Poetaz Louise	\$30.00 per 1,000
Victoria (D. N.)	50.00 "	Sir Watkin (D. N.)	35.50 "
Emperor (D. N.)	42.50 "	Dbl. Von Sion (D. N.)	42.50 "
Poetaz Alsace	26.50 "	Glory of Leiden	39.00 "
Poetaz Irene	42.00 "	Barii Conspicuous	24.00 "

HYACINTHS

Your selection of following varieties, 1st size 17-18 c/m	\$85.00 per 1,000
La Victoire	Queen of the Blues

MINIATURE HYACINTHS

Your selection of following varieties, 12-14 c/m.....			\$35.00 per 1,000
Moreno	Ruby	Alida Jacoba	
Johan	Roi des Belges	Lord Macauley	
Heroine	Gr. Vainqueur	Lord Balfaur	

CAN ALSO OFFER

FOR immediate delivery—RAFFIA.

FOR later delivery—BEGONIA and GLOXINIA BULBS, JAP. LILY BULBS.

Write for prices, stating specifically what you require

TERMS OF PAYMENT 60 days net, less 2% cash 10 days from invoice date. Cash with order from those who have not established credit with us. All stock is offered subject to prior sale.

All goods offered are of the high grade we have exclusively handled since 1902. RELIABILITY is our motto. We own our own building of 7 floors, a city block through, and give prompt, efficient service on all orders that reach us in time.

McHUTCHISON & CO., The Import House, 95 Chambers St., New York

HORTICULTURE

Vol. XXX

NOVEMBER 8, 1919

No. 19

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.



POM PONS

This year finds us with the best stock of Pom Pons we've ever handled, not only as to quality, but variety and quality, as well. A large assortment of colors and shades.

\$3.00, \$4.00 \$5.00 per doz. bunches.

POM PON SPECIAL
Our selection, \$3.00 a doz. bunches; 25 or 50 bunches at \$2.50 per doz. bunches; in lots of a hundred or more, \$15.00.

CHRYSANTHEMUMS

Whites, Pinks and Yellows;
Large, Medium and Small.
\$10.00, \$15.00, \$20.00, \$25.00,
\$30.00 per 100.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.

S. S. PENNOCK COMPANY

The Wholesale Florists of Philadelphia

NEW YORK 117 W. 28th St. PHILADELPHIA 1608-1620 Ludlow St. BALTIMORE Franklin & St. Paul Sts.
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FERNS

THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we **RECOMMEND IT MOST HIGHLY.**"

Strong plants, 2½-inch pots....\$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots.... 7.50 per dozen, 50.00 per 100
Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:	Each
Elegantissima, elegantissima compacta, and Muscosa, 2½-inch	\$0.35
Elegantissima and elegantissima compacta, 6-inch	.75
Muscosa, 5-inch	.75
Elegantissima and elegantissima compacta, 8-inch	2.00
Elegantissima and elegantissima compacta, 10-inch	4.00
Harrisii, 8-inch	3.00
Dwarf, Boston, 8-inch	2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown. N. Y.

FERNS

We have an excellent lot of pot grown Boston and Scottii Ferns ready for an immediate shipment before cold weather sets in. The following price will hold good during November. Shipped without pots.

Size	Doz.	100	1000
3 inch.....	\$1.00	\$ 8.00	\$ 75.00
4 inch.....	3.00	20.00	190.00
5 inch.....	4.50	35.00	325.00
8 inch, \$1.50 each.			

ALTERNANTHERAS, Alyssum, Double Giant and Dwarf, **Begonias** Gracilis and Vernon mixed colors, **Coleus** Standard sorts, **Hardy English Ivy**, **Lantanas**, assorted, **Heilotrope**, **Lobelia**, Crystal Palace Gem, **Moonvines**, 2-in. \$2.75 per 100.

Send for Catalogue Cash With Orders

R. Vincent, Jr., & Sons Co.
WHITE MARSH, MARYLAND

Henry H. Barrows FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTT CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.

ADRIAN, MICH.

Snow Queen Canna

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The CONARD & JONES CO. WEST GROVE PENN., U.S.A.

Robert Pyle, Pres. Antoine Wintner, Vice-Pres. We are subscribers to the Nurserymen's Fund for Market Development

ROBERT DYSART CERTIFIED PUBLIC ACCOUNTANT

Simple method of correct accounting especially adapted for florists' use.

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40 STATE STREET . . BOSTON

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HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 415, DUNDEE, ILL.

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN.

The following is taken from the October number of the Journal of the S. A. F. & O. H., delayed in its appearance through the vexatious strike in the printing trade in New York, which has tied up in the neighborhood of a thousand publications:

"The Influence of Our Slogan."

Of late we have, in the columns of the trade press presented evidence of the growing popularity of our slogan, "Say It With Flowers" and its use in the direction of publicity other than that which our Campaign Fund provides. George E. M. Stumpp, one of New York's prominent florists, and a generous supporter of our campaign, is a member of the Kiwanis Club, a national organization of business men, with branches in all of the principal cities of the United States. The club has an official organ known as the "Kiwanis Torch," and Mr. Stumpp sends us a clipping from the August number which is further evidence that our slogan is carrying us beyond the sphere wherein we hoped to spread our doctrine. We intended in our limited space to reproduce only a portion of the article, but the sentiment embodied in it is so beautiful that we ungrudgingly present the greater part of it. It is written by the editor, who evidently wrote it while convalescing from a sickness. Here it is:

"Then of course I had to lie around in bed for ten days and Sim., the Sec. of my Kiwanis Club, sent me some flowers and he must have passed the word to some other secretaries for, bless me, if the wagons didn't begin to back up in front of the place with flowers until the neighbors thought I had died.

"Were you ever lying in bed, so sick you wanted to get up and bite your father, and then have your wife come to the bedside and lay a great armful of roses beside you?

"It makes a great big lump come up in your throat and makes you sniff like you had a cold, and more than that, it makes you realize that behind all the badinage, all the kidding, all the college fraternity nonsense that permeates these organizations to which we belong, there is a real depth of love, a real sympathetic interest and a real feeling of regret that you are down on your back and suffering.

"To know that around your town are fellows who love you, who with an armful of daisies or a great sheaf of gladioli are saying, 'Old man, mere words are but empty and meaningless things but let this bunch of flowers show you that I have stopped in the midst of a busy day to send you these that you may know I have thought of you and want their fragrance

JUST RECEIVED HOLLAND BULBS FREESIA PURITY ¾ INCH UP

Prices on Application

J. M. THORBURN & CO.

53 Barclay Street
Through to 64 Park Place
NEW YORK CITY

KELWAY & SON SPECIALIZE IN SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

DUTCH BULBS PAPER WHITES JAPANESE LILIES

Write for prices

AMERICAN BULB CO.

172 N. Wabash Ave., Chicago, Ill.

Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds.

Improved styles in Implements
Catalogue upon application.

16 So. Market Street
BOSTON, MASS.

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, sociology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time.

Circulars and other information will be mailed on application.

The New York Botanical Garden

Bronx Park NEW YORK CITY

to represent to you the fine feeling of love and friendship I have for you.

"Darn it all, fellows, as one after another came, I found that a big tear was creeping down my face and I turned over so my wife would think it was the light shining in my eyes that did it.

"Our Kiwanis florist says, 'Say It With Flowers,' and I am in most hearty accord with the thought, for there is no way you can say it so beautifully, so sentimentally and so well. Lots of times I have sent them but this is my first experience on the receiving end and I want to tell you that I shall send more in the future.

"I never expect to need any charity from any of the organizations to which I belong. The prospects are that I shall never be in want. But if my years of activity, all my time invested, all the dues I have paid and everything I have done in all of them paid me no other dividend than those flowers when I was sick, I should feel amply repaid and that I have made a most wonderful investment.

"We weary of eating and drinking, of going up and down the world, of looking at its mountains, the rivers that water it and the cities which make its prosperity. We tire of chasing the laurel wreath of Fame and the bauble of Prominence. But we never tire of our friends and those who smile as they look into our eyes.

"After all, the friends we accumulate are the greatest asset we have as we grow on toward the twilight zone of life. Friendship is love with his wings clipped so he cannot fly away, and as they represented these friends those flowers were the sweetest things I have ever known."

And yet our committees are finding it a hard task to collect a fund big enough to carry our slogan—admittedly the best and most suggestive of all the slogans used in the business world—to the people whose minds are open to its reception, and whose pockets are to furnish the material benefit which is the object of our campaign. When our large army of non-subscribers can, even in a small way, realize the vast amount of good being created for our industry, and in which they are sharing, there will, perhaps, be forthcoming a better response to our appeals for subscriptions. It is hard for anyone who has intelligently followed the course of our campaign to understand why so many florists continue to hold aloof with their support. E. J. Steele, manager of Steele's Pansy Gardens, Portland, Ore., writes, under date of October 23rd: "Friend Young: Am pleased to see the good work going on, and often wonder if the multitude of 'Let George do it' tightwads in America doesn't make you feel somewhat weary." Did our committees not have the greatest confidence in the ultimate attainment of their aims, they might get weary. But the very excellence of their success so far is sustaining them in their work, and their 'feet' are still 'warm.'"

The campaign must be kept going. We have entered "the land of promise," and our reward is already at hand. Help us, Friend Non-subscriber, to our goal of \$100,000, so that we may all share in the bounty which our craft so much desires.

JOHN YOUNG, Secy.

1170 Broadway,
New York City.

CARNATION CUTTINGS

For December and later delivery. There will be a shortage. We advise ordering early.

	100	1000
Ruth Baur	\$12.00	\$100.00
Ethel Fisher	14.00	115.00
Morning Glow	7.00	65.00
Laddie	10.00	90.00
Pink Delight	7.00	60.00
White Benora	7.00	65.00

Enchantress Supreme, Rose Pink Enchantress, Mrs. C. W. Ward, Merry Xmas., Rosalia, Aviator, Nebraska, Beacon, Crystal White, White Enchantress, White Wonder, Miss Theo, Belle Washburn.

\$6.00 per 100 \$50.00 per 1000

Matchless, Pink Enchantress, Alice, White Perfection

\$5.00 per 100 \$40.00 per 1000

PEONY CLUMPS

White, pink and red, averaging 15 to 20 eyes per clump \$50.00 per 100.

BULBS: Clearing out now for the season. Send for our Bargain List.

C. U. LIGGIT, Office Philadelphia, Pa.
303 Bulletin Bldg.

IBOLIUM

THE NEW HYBRID

HARDY PRIVET

(L. Ibota x Ovalfolium)



Natural Habit



When Trimmed

Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery. The Elm City Nursery Co., WOODMONT NURSERIES, INC., New Haven, Conn. Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.

We are Headquarters for the BEST OF EVERYTHING
IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for future delivery.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties
Thoroughly tested at our trial grounds, Raynes
Park, London, England. Send for Catalogue
CARTERS TESTED SEEDS, Inc. 166 Chamber of
Commerce Bldg. Boston, Mass.

IF in need of RELIABLE NURSERY STOCK
that is well grown, well dug and well packed
Send to the BAY STATE NURSERIES
Wholesale and Retail NORTH ABINGTON, MASS.

PREPARE FOR THE TRADE

Order plant stock while the supply is good and shipping can be done with less damage and expense.

Pelargonium Easter Greeting, also mixed, including four best sorts, 2½-inch, \$12 per 100.

Let us quote you on Ramblers and Baby Ramblers. One year old plants, excellent for growing on. We have the best sorts and in quantity.

10,000 Hydrangeas. Otaksa and best French sorts. 3-inch, \$12 per 100; 6-inch, heavy, \$40 per 1,000; 7,000 2½-inch at \$7 per 100, \$65 per 1,000.

Extra heavy ADIANTUM HYBRIDUM, 6-in., \$75.00 per 100.

Extra good CHATELAINE BEGONIA, 2¼-in., \$7.00 per 100, \$65.00 per 1000. 3-in., \$12.00 per 100.

CALENDULA Orange King, the O. K. strain. The result from a number of years of greenhouse selecting. If you want the best let us supply you. \$5.00 per 100, \$45.00 per 1000.

BIRD'S NEST FERN. Excellent stock. 2¼-in., \$18.00 per 100; 3-in., \$27.50 per 100.

FERNS

Nephrolepis, Verona, Dwarf Boston, Scottii, Elegantissima, Teddy Jr., Roosevelt

POT-GROWN 100
2½-in. \$12.50
4 -in. 50.00

BENCH BOSTONS
Ready for 4-in. pots, \$50.00 per 100.
PTERIS Wimsettii and Victoria, 3-in., \$16.00 per 100.

PTERIS Rivertoniana. 3-in., \$20.00 per 100.
The above are especially fine—ready for 4-in. pots.

FERNS for fern dishes. As- 100 1000
sortment of best sorts,
2¼-in. \$6.00 \$55.00
3 -in. 12.00

KENTIA Belmoreana. Strong Doz. 100
2¼-in. \$1.50 \$12.00
3-in., \$25.00 per 100. 4-in., 50c. each

IVY, English. 3-in., \$8.00 per 100.

CINERARIA

Selected strain, 2¼-in., \$7.00 per 100; \$65.00 per 1000.

WINTER FLOWERING FORGET-ME-NOT. Best Boston Market Forcing Strain. \$7.00 per 100, \$65.00 per 1000.

SNAPDRAGON. Ready now. Nelrose, Silver Pink, Enchantress, Keystone, Phelps White and Yellow, 2¼-in., \$6.00 per 100, \$55.00 per 1000.

BEGONIA MRS. M. A. PATTEN. Dark sport of Chateleine. Buy now and have them ready for Xmas. 2¼-in., \$10.00 per 100.

Boston Yellow Marguerite

We offer a carefully selected strain, grown by a specialist in this line and furthermore send out no blind plants. They are worth the price. 2½-in., \$10.00 per 100; 5½-in., heavy blooming stock for quick results, 50c. each.



BEGONIA. A good offer in Melior and Cincinnati. Strong, bushy plants from leaf cuttings. 3½-in. ready to repot in to 5-in. at 50c. each. 2½-in. from top cuttings, strong plants, 25c. each.

CYCLAMEN. Blood red, salmon, crimson, white carmine eye, 4-in. ready for 5-in.; 50c. Blg. fancy plants in 5-in. pots at \$1.35 each.



SIM'S YELLOW POLYANTHUS

The Best on the Market
Winter flowering clumps
ready now.

\$8.00 per 100 - - \$75 per 1000

TWO NEW FERNS

NEPHROLEPIS MACAWII

A Winner

2½ in., \$20 per 100.

THE VICTORY FERN (Nephrolepis Victoria)

Bronze Medal at Detroit.

	Per Doz.	Per 100
2¼ in. pots.....	\$3.00	\$20.00
3½ in. pots.....	7.50	20.00

OTAHEITE ORANGES, for growing on, 2¼-in., \$20.00 per 100.

LATANIA Borbonica, Fan Leaf Palm, 3-in., \$30.00 per 100.

ARECA Lutescens, 2½-in., single plants, \$15.00 per 100; 2½-in., made up three plants to the pot, \$20.00 per 100.

ASPARAGUS Plumosus, seed- 100 1000
lings \$8.00
2¼-in. \$5.00 45.00
3-in. 10.00

Sprengeri Seedlings..... 7.00
Sprengeri, 2¼ in. 5.00 45.00
3-in. 10.00

CHRISTMAS JOY PEPPER. Heavy, 4½-in. pots, \$30.00 per 100. Well set with Berries and colored. A Bargain.

Asparagus Plumosus Seed

Massachusetts greenhouse grown, 1000 \$3.00; 5000 \$13.50.

Coeleus Trailing Queen

Fine for mixed pan, basket and hamper work. 2½-in., \$6.50 per 100, \$60.00 per 1000

Crotons

Nice 2½-in. plants. Get your stock now and be ready for your mixed pans and hampers for the holidays. A good assortment of highly colored sorts both broad and narrow leaf types. \$35.00 per 100.

Dracaenas

Godsefiana, Sanderiana, Lord Wolseley, Kelleriana and Terminalis. They are highly colored and just right for mixed pans and hampers for the holidays. You will save money by getting them now. Strong, 2½-in. pot plants, \$25.00 per 100; 3-in., select stock, \$40.00 per 100.

GYPSOPHILA SEED

(Nicholson's Forcing Strain)

Earliest and Best

¼ oz., \$50c.; ½ oz., \$8c.; 1 oz., \$1.50

GIGANTEUM LILIES

We still can supply ALL SIZES.

Let us quote you RIGHT PRICES on best quality and amount you want.

Next lot due November 5th. Ask us about special offer on 6¼-7 size. It will interest you.

Easter Sunday (1920) falls on April 4th

Cash or satisfactory trade references.

No C. O. D. Shipments.

L. J. REUTER CO. Plant Brokers

15 Cedar St., Watertown, P. O.
BOSTON, MASS.

HORTICULTURE

Vol. XXX

NOVEMBER 8, 1919

No. 19

THE TALK OF THE TRADE

Discussing the question of greenhouse labor, with some of the Chicago employers who are keeping their places up to the highest efficiency with much less help than before the war, the solution seems to be reduced to one method only and that is this,—employers must reduce their work to a system so as to get more work done with less labor and yet work their men less hours. If this seem impossible, study the methods of the manufacturer in the modern up-to-date factory. Every unnecessary move is eliminated, every man knows his work and does it and not a minute is lost in duplication or waiting.

Every greenhouse establishment has need of greater system and it is the only thing that will make a little labor go a long way. This is not theory that cannot be put into practice. There are growers in Chicago who made more money this year than ever before because they have so systematized their work that they use less help, especially the unskilled help.

The legal rights of the employees of a firm to withdraw and form an organization of their own has always been recognized, but their right to use their time while drawing salary from their employers, for arranging the details of such an organization seems about to be tested in the courts. Under the offer of a \$10,000 reward for certain evidence of "conspiracy," the Albert Dickinson Seed Co., of 2750 West 35th street, Chicago, said to be the largest seed concern in the world, made the announcement of its labor troubles in the local papers a week ago. This was followed by a double page advertisement in the Economist of this week, which, as advertising copy, is extremely unique and embodies business principles, which coming from a firm of the high standing and long experience of the Albert Dickinson Seed Co., is especially worthy of attention. The heading is as follows: "Which gets the farthest, 'an eye for an eye, and a tooth for a tooth' or 'love thy neighbor as thyself'?"

It is interesting to see the quick way in which all the few Bernice carnations which reach the Boston market are snapped up. "Wait until we can get Howard's new carnation," is a com-

mon remark. And truly Bernice seems worthy of all the good things that are being said about it. It is a seedling of Fenn and Beacon which has been in cultivation for five years and which has proved itself a remarkable crimson flower. W. D. Howard of Milford, Mass., the originator, does not claim that it is a fancy flower, but presents it as a first class commercial variety. It is a very easy grower, for one thing, bearing fine flowers on long, stiff stems. It seldom bursts, and it does not make a lot of surplus grass, according to Mr. Howard, throwing the flowers quickly. The awards which Bernice has received are many, including first prize at the International Flower Show in New York in 1917. Plants are now being disseminated widely. Boston salesmen are particularly keen about Bernice, for there is no city in the country where a crimson carnation sells better.

The members of the Retail Florists' Association of Boston at the meeting held at the Parker House, Tuesday evening were fortunate in seeing specimens of a number of good flowers. The new Rose Pilgrim was shown particularly well. This is a striking flower with two very strong points, namely color and fragrance. As a matter of fact there is no weak point apparent in a vase of blooms.

The new Rose Frank W. Dunlop was also well shown. It was excellent stock and the keeping qualities are evidently of the best. For a dark pink rose there is as much life as would seem possible with no tendency toward blue.

The new Chrysanthemum Mrs. J. Leslie Davis, which is a sport of William Turner, is identical in every way with Turner, except in color; the color is a clear lavender pink, and exhibition tables will undoubtedly show the new Turner in great shape.

William R. Nicholson had two lots of Mensa, white and yellow, not new varieties by any means, but particularly well grown.

The result of the State election was announced, and the association immediately voted to send to His Excellency, Governor Calvin Coolidge a bouquet of flowers. The flowers were

arranged by Mr. Sydney Hoffman, the blooms of Dunlop and the Mensa Chrysanthemums being used, and were sent to the Governor with the congratulations of the Club. The blooms of Chrysanthemum Mrs. J. Leslie Davis were sent to District Attorney Elect, Nathan Tufts, who was at dinner in an adjoining room.

A novelty of interest to every plantsman is the new Begonia Optima, from Lemoine of France. It has been in this country about four years, but has not been developed commercially. From present indications Optima will be tried out the coming season and bids fair to make a sensation.

Optima is similar in growth to Cincinnati and Melior, but more woody. Specimen plants have been shown three feet high and three feet in diameter. The foliage is very much like Melior and large specimens can be finished with ample foliage and a mass of bloom. The flowers are large, individual blooms averaging 2 to 2½ inches in diameter, and of a very lively salmon pink color, and a strong point in favor of this variety is its keeping qualities. Plants loaded solid with blooms keep for weeks and outlast any of the other varieties. A limited amount of stock will be available next spring and is being eagerly sought for. Young stock is propagated from leaves. Top cuttings may also be used, but of course, are not so satisfactory. Plantsmen, keep your eye on it.

REUTER CO.'S NEW LOCATION.

The L. J. Reuter Co., has transferred its headquarters from Waltham, Mass., to Watertown, where the facilities for doing business are better and where a very desirable location has been obtained. The new address is 15 Cedar street, Watertown, P. O., Boston, Mass. Watertown is a suburb of Boston, and has a branch postoffice. In less than a year Mr. Reuter has built up an extensive plant brokerage business, dealing with higher grades of florists' plants, as well as handling large numbers of bulbs. The business is not confined to New England by any means, but extends over all the Eastern States, and as much of it is done by mail, commodious and convenient offices are needed, which have been found in Watertown.

BOSTON FLORISTS' ASSOCIATION. Plans Laid for "Say It With Flowers" Week.

The monthly meeting of the Boston Florists' Association held Tuesday evening was one of the most enthusiastic meetings which the organization has yet held. Most of the time was given over to a discussion of "Say It With Flowers" Week. When the dinner was over the advertising fund had been greatly increased and plans had been laid for bringing flowers before the public in an effective way.

Henry Penn, who is president of the association, presided at the banquet and told of plans for making Armistice Day a veritable floral day. Maj. P. F. O'Keefe of the national association, the principal speaker of the evening, emphasized the necessity of advertising and of placing particular stress on "Say It With Flowers."

"The successful man who is succeeding in business today is doing so through advertising," he said. It is to the mutual benefit of all florists to get more people to buy more flowers on more occasions. As an example of this there are 300,000 birthdays daily in this country, and there is no better gift than flowers on such events."

It was decided to send flowers to the hospitals during the week and to take part in the parade on Armistice Day, if a parade should be held. General assent was given to a suggestion of Maj. O'Keefe that advantage should be taken of the opportunity to show that the "Say It With Flowers" slogan is a national one and not the property of any individual. Maj. O'Keefe recommended that all the growers make a feature of this slogan in their window decorations the coming week. The committee in charge of the week's arrangement consist of W. R. Nicholson, Charles F. Boyle, Sidney Hoffman, W. C. Stickel, J. Cohen, A. Christensen, B. F. Lettson and Herman Bartsch.

Three new members were taken in at the meeting. They were John Boyle, general manager for Thomas Galvin, Inc., John Cook, manager for John O'Brien, and Louis Cohen, of the New England Floral Supply Co. Mr. Boyle after offering to do anything in his power to help the association, subscribed \$100 for the advertising fund of "Say it With Flowers" Week.

The tables at the dinner were attractively decorated with the new 'mum Mrs. J. Leslie Davis, a sport of William Turner, contributed by Charles Totty, a vase of John W. Dunlop roses sent on by A. N. Pierson, Pil-

grim roses from the Montgomery Rose Co., and Yellow Menza chrysanthemums, from Wm. R. Nicholson. The latter also had three blooms of a yellow sport of October Frost.

PRIZES AWARDED.

Results of the Exhibition in New York City.

The prizes awarded at the exhibition of the Horticultural Society of New York, Oct. 30 to Nov. 2, 1919, were as follows:

Chrysanthemum—Plants.

Open to all. Specimen bushes—White: Mrs. Payne Whitney, Geo. Ferguson, gardener, first. Anemone or single: Mrs. Payne Whitney, first.

Specimen standards. Any color: Mrs. Payne Whitney, first.

Specimen, odd shape. Any color: Mrs. Payne Whitney, first; Mrs. A. A. Anderson, Robt. Williamson, gardener, second.

Chrysanthemums—Cut Flowers

For commercial growers. Stems not less than three feet. Vase of 20 blooms. 1 variety: Chas. H. Totty Co., first. Stems not over 15 inches, all named kinds. Collection of 25 varieties, 1 of each: Chas. H. Totty Co., first.

Five terminal sprays to a vase, not less than 5 flowers to a spray. Collection of pompons, 25 varieties: Chas. H. Totty Co., first. Collection of singles, 25 varieties: Chas. H. Totty Co., first.

For non-commercial growers. Stems not less than 2 feet: 6 white, Mrs. E. S. Bayer, Alex. Thomson, gardener, first; 6 any other color, Mrs. Payne Whitney, first; vase of 1 or more varieties, arranged for effect: Mrs. F. A. Constable, Jas. Stuart, gardener, first; Mrs. Payne Whitney, second.

Stems 18 inches, 12 vases, 12 varieties, 3 of each: Mrs. E. S. Bayer, first.

Stems not over 15 inches. Collection of 24 varieties, 1 of each; Mrs. E. S. Bayer, first; Mrs. Payne Whitney, second. Collection of 12 varieties, 1 of each; Mrs. E. S. Bayer, first.

Five terminal sprays to a vase, not less than 5 flowers to a spray.

Collection of singles, 12 varieties: Miss S. D. Bliss, John T. Burns, gardener, first.

Collection of pompons, 12 varieties: Mrs. Payne Whitney, first.

Collection of anemones, 6 varieties, disbudded, 6 blooms of each: Mrs. Payne Whitney, first.

Vase of pompons, disbudded, 12 flowers, 1 variety: Mrs. Payne Whitney, first.

Dinner table decoration: Mrs. Payne Whitney, first; Mr. W. B. Thompson, second.

Roses—Cut Flowers.

For commercial growers. New varieties of roses, not in commerce: Chas. H. Totty Co., and A. N. Pierson, Inc.

For non-commercial growers. 18 red roses: Mrs. J. Hood Wright, Chas. Thomas, gardener, first. 18 dark pink roses: Mrs. L. U. Skidmore, Louis Plantin, gardener, first; Mrs. J. Hood Wright, second. 18 light or fresh pink roses: Mrs. Skidmore, first; Mrs. Wright, second. 18 any other color rose: Miss S. D. Bliss, first; Mrs. Skidmore, second. 50 roses, arranged for effect; Mrs. Skidmore, first.

Carnations—Cut Flowers

For non-commercial growers. 18 white: Mrs. Payne Whitney, first; Mrs. J. Hood Wright, second. 18 Enchantress shade: Mrs. Payne Whitney, first; Mrs. J. Hood Wright, second. 18 Lawson shade: Mrs. Payne Whitney, first. 18 Crimson: Mrs. Payne Whitney, first. 18 yellow: Mrs. Payne Whitney, first. 18 variegated: Mrs. Payne Whitney, first.

Orchids—Plants.

For commercial growers. Collection of orchids: Lager & Hurrell, first, the silver cup of the society.

For non-commercial growers: 1 orchid plant, Mrs. L. U. Skidmore, first.

Vegetables

Open to all. Largest and best collection: Miss M. Valentine, A. V. Carver, gardener, first; Mrs. Payne Whitney, second.

Special Prizes.

Arthur N. Cooley, Oliver Lines, gardener, won the Clement Moore Prize for the best Hybrid Cattleya, Laeliocattleya, or Brasso-cattleya.

Mills & Co., for display of Dahlias, cash.

J. A. Manda, for display of plants of *Cypripedium insigne sanderae*, cash and gold medal.

Chas. H. Totty Co., for vase of Madame Butterfly rose, silver medal.

Robt. G. Wilson, for a new fern, not yet named, silver medal.

Howard Phipps, L. I. Muller, gardener, for vase of light pink large-flowered chrysanthemum, cash; for collection of mixed seedlings, cash.

A. N. Pierson, Inc., for a collection of pompon chrysanthemums, and another of singles, cash.

Mrs. A. A. Anderson, for group of begonias, cash, and for two plants of winter-flowering begonias, silver medal.

The Judges were Wm. Smith, Portchester, N. Y.; James Ballantyne, Bridgeport, Ct.; G. Middleton, Tarrytown, N. Y.; Wm. Robertson, Villa Nova, Penn and Walter Angus, Taconic, Ct.

ANNOUNCEMENT

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for 1920

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ARE YOU ONE OF THE GOOD-WILL FLORISTS?

Have you ever studied men to the end that it becomes a real pleasure? You know, of course, there are many men in this world who get a great deal of fun by being a good fellow to the extent of taking Tom out and giving him a good time, lined up against the —Well, that's ancient history now; then there's the type that's good to everybody but his own family; and there's the fellow that looks out for nobody but himself and says he should worry. Also the fellow who lets you do all the buying and forgets to put his hand down occasionally; then there's the fellow that permits you to do nothing unless he does his share, and who gets real enjoyment out of life by being a regular feller. That's the kind of a man we are talking about today.

The type who wants to do his share, who feels that when there is a job to do, he wants to do his part. Some want to help in the work and can't find time, and others wouldn't help if they could. Then there is the fellow who says "I can't help in the actual work, but let me contribute my share." Now, he's a regular feller, and we are coming to the point.

The Publicity Campaign is lagging

for funds and the man that creates good-will in any community is the man who does his share whenever he knows there is something going on. To be in the good-will class, florally, is to be a contributor to the publicity fund and when you have joined the "Say it With Flowers" Club, your name is linked up to the good-will florists who are doing their share to boost the other fellow as well as yourself.

Can any movement (commercial) be a more just one than our National Publicity Campaign, where every man gives as he pleases and everybody shares in the general good. Even the business itself rises to a point where we all feel the cause worthy.

The type of giver, when all is said and done, is the kind that deserves the good-will of his fellow florists. They say it pays to advertise. Our fund lacks \$40,000 towards its goal. Will you help supply the deficit?

HENRY PENN,
Chairman National Publicity Campaign

COTINUS AMERICANUS.

The so-called Smoke-tree (*Cotinus coggygia*) of eastern Europe is found in many old-fashioned gardens in which it is conspicuous in summer by the great clusters of the much-lengthened, hairy, colored stems of the small

flowers. Much less well known is the American species of this genus. The American Smoke-tree grows naturally only in the neighborhood of Huntsville in northern Alabama, in southern Missouri, and in eastern Oklahoma and Texas. First raised in the Arboretum in 1882 from seeds collected on the high limestone ridge a few miles south of Huntsville, Alabama, the American *Cotinus* has proved perfectly hardy here. It has grown, however, into a broad tall shrub and not as a tree, although on the Huntsville ridge trees thirty feet tall were once abundant. The "smoke" of the American species as compared with that of the Old World plant is inconspicuous, and its value is found in the splendid orange and scarlet coloring of the leaves at the end of October when it is one of the conspicuous plants of the Arnold Arboretum. A large specimen can be seen on the left hand side of the Meadow Road next to the Sumachs, and there is another by the road near the top of Peter's Hill.

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Established by William J. Stewart in 1904

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The Gould Bill

Considerable discussion has been brought about as a result of HORTICULTURE's publication of the Gould Bill in a recent issue. At least one man who is very prominent in the horticultural world has expressed himself to the effect that the bill is altogether inadequate because of the small appropriation which it makes. Nevertheless there are many members of the American Association of Nurserymen who think that the bill has merits and that if it is passed the results will be of benefit to the trade. The argument is something like this: If a movement in this direction can be started, the project officially approved by the government, and a precedent established, the nurserymen will have a better chance to get a larger and more satisfactory appropriation later. One leader in the business puts the matter in this way, "I remember that in my home town we once wanted a gymnasium for the school. It meant getting a school meeting to endorse the idea and vote authority for the money. We asked for \$7,500.00 because we thought we could get that much. We did get it and we spent it. It was not enough but it enabled us to make a showing that got us \$26,000.00 more to complete and equip the gym. If we had started off with the request for the larger sum we should have been turned down altogether. Conditions have to be met with the means most likely to bring results."

Perhaps, too, the purpose of the Gould Bill has been somewhat misunderstood. The idea is not to produce seedlings in quantities, but to carry on experimental work and show the possibilities of growing seedlings commercially in this country. Now here is a point which must interest everybody who is engaged in horticultural work. The Federal Horticultural Board has claimed in justification of its quarantine regulation No. 37 that we can grow here at home all the stock that we

require, so that we need not suffer from the shutting out of foreign stock.

Perhaps that is true, but if so the fact has never been demonstrated. The stock never has been grown here and isn't being grown here now. Doesn't it stand to reason that there are plenty of shrewd business men in the nursery trade who would have seen the opportunity to develop a market for seedlings if a profitable business of that sort had been promised? Yet perhaps people in general do not realize to what extent this has actually been attempted. It has been tried in one instance after another without satisfactory results. Perhaps the Federal Horticultural Board doesn't know it, but the fact remains.

Be that as it may, the board says that the thing can be done, and now, candidly speaking, HORTICULTURE would like to see the Board take a hand in trying it out. If the Gould Bill is passed, perhaps it will bring about some interesting developments that will not be without benefit to the trade.

New plant material

Whatever may happen to the Gould Bill, and whether or not the mandate of the Federal Horticultural Board continues in force indefinitely, there is reason to believe that the present list of plant material is going to show a great change in the near future. And this is well. We think we are safe in saying that there are many varieties of different plants which nurserymen have continued growing largely through force of habit or perhaps because they have followed along the line of least resistance, as all of us are likely to do. The result has been to perpetuate in the gardens of the country some plants which are not worthy a place there, at least when compared with other plants which might be substituted. Without doubt many splendid new things, and indeed no little native material which has been known in a limited way for a long time, has been sadly neglected. No one can walk through the Arnold Arboretum without wondering why it is that so many of the magnificent shrubs and trees to be found there are not obtainable from the nurserymen. The demand for these new and better things is gradually making itself heard and the nurserymen who has his ear to the ground will get a stock and sell it.

Mistakes may be made. Easy propagation may lead nurserymen to offer plants which do not meet with favor, but in the long run the enterprise is going to show a profit. Within the next few years there is bound to be a remaking of nursery catalogues all over the country, and some of the old stuff which had been considered standard will go by the board. Among them will be plants which while they flourish in gardens across the water are not suitable for conditions here.

When the nurserymen begin to take up the newer plants with enthusiasm, exhibit them at the conventions, get them written up in the trade papers, and illustrated in the catalogues, there will be no difficulty in making sales. Indeed the work which the American Association of Nurserymen is carrying along under the direction of that very capable gentleman, Mr. John Watson, will help to take care of this end of the matter. The difficulties come in obtaining a stock, for the expenses of propagation and the process of getting acquainted with the habits of new plants require time and outlay. The extent to which the nurserymen work together in this matter, realizing that what is for the advantage of one is for the advantage of all, will be shown in the general results. This is an era of transition, though, and it is coming in the horticultural world as elsewhere.

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Moody	Lilac purple edged brown	9.00 "
Plutarchus	Lilac bronze	11.00 "
Sabrina	Light coffee brown	4.00 "
Samson	Bronze bordered violet	14.00 "

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Pink Beauty	Cherry rose	5.00 "
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There is an opportunity now to make
some extra money from outside win-
dow boxes. It has come to be a grow-
ing custom to fill these boxes with
evergreens for winter. The effect is
always excellent whether the boxes
be on a private house or on a store or
on a factory. The possibilities in this
line have not been taken full advan-
tage of, though. There is no reason
why the practice could not be greatly
extended with a little pushing. It
would be a simple matter to send a
well worded note or a typewritten cir-
cular to business concerns and to own-
ers of private residences who have
been using window boxes during the
summer, asking them if they would not
like to have the boxes filled with cold
weather material.

I think that it would pay the retail
florist to make a good window display,
showing two or three boxes of different
kinds filled and ready for use. It
might be even possible to arrange an
imitation window with a box attached.
The D. Hill Nursery Co., of Dundee,
Ill., has made a specialty of win-
dow box evergreens for several years.
Among the plants which they find use-
ful for the purpose are Picea canadensis,
Pinus Mugho and Thuja pyramid-
alis. In the southern states consider-
able more material is available.

THE MOUNTAIN HALESLIA OR SILVER BELL TREE.

Until the beginning of the present
century the botanists who visited the
high Appalachian Mountains appear to
have taken it for granted that the
Halesia which grows at altitudes
above 2500 feet, was the same as the
bushy tree of the foothills and upland
valleys of the Piedmont region and
southward. This idea having been
generally accepted and as the lowland
plant had for more than a century
been common in gardens no attempt
was made to cultivate the mountain
tree, and the gardens of the United
States and Europe have been deprived

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Per 1000, \$75.00
MIXED COLORS
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Good either for Pots
or for Cutting

\$10 per 100

\$80 per 1000

WILLIAM SIM

**CLIFTONDALE
MASS.**

of one of the handsomest trees of the North American forests. The lowland plant, *Halesia carolina*, is usually shrubby in habit with numerous stout stems wide-spreading from a short stem, and covered with nearly smooth or slightly scaly bark. The tree of the high mountains is not rarely eighty or ninety feet high with a straight trunk sometimes three feet or three feet and a half in diameter, often free of branches for fifty or sixty feet from the ground and covered with bark separating into great platelike scales like those of a scaly-barked Hickory or a Swamp Cottonwood. The flowers are about one-third larger and the fruit is twice as large as the flowers and fruits of the lowland tree.

The habit of the plant and the large flowers and fruits are reproduced in the seedlings, which when the seeds germinate begin to grow as trees with a single stem. The seedlings show no variation in habit, and the young trees grow with a single straight stem with short branches which form a narrow symmetrical, pyramidal head. The trees often begin to flower and to produce fertile seeds before they are ten feet tall. The mountain *Halesia* has been described as a variety (var. *monticola*) of *H. carolina* but it will

probably be, when better known, considered a species.

This tree was introduced into cultivation by Mr. Harlan P. Kelsey who for many years has maintained in western North Carolina a nursery of Appalachian plants. By him it was sent to the Park Department of Rochester about twenty-five years ago, and in 1907 it came from Rochester to the Arboretum. This mountain tree has proved to be perfectly hardy in the Arboretum where it is growing rapidly and where it has now flowered and produced fruit since 1913. It is a tree which seems destined to play an important part in the decoration of American parks and which may prove useful for street and roadside planting.

—*Arnold Arboretum Bulletin*.

A GOOD WINDOW.

Mr. Eberhardt of the Rosedale Flower Shop of Schnectady, N. Y., has been receiving high commendation from friends and passersby for the unique Hallowe'en display in his window. Considerable ingenuity was shown in the arrangement. Full advantage was taken of the bright colors of autumn. The main motive was

supplied by autumn leaves and jack-o-lanterns which set off the beautiful pompom chrysanthemums in white pink and purple. At night, tiny red lights concealed under the foliage, added to the effect. The witch seemed just about to arrive, apparently, as the cauldron was boiling and the famous broom was near at hand stood ready to carry her on her midnight journey.

ANNOUNCEMENT

I have engaged stalls in the Boston Co-operative Flower Market and made arrangements which will enable me to ship Cut Flowers and Plants to the Retail Florist direct from the grower. I am Agent for a number of the larger growers of Cut Flowers in New England. These growers ship to this market every day. You can readily understand that any orders you may favor me with will be filled with good fresh stock at market prices.

I have taken up this enterprise at the request of some of the largest buyers of Cut Flowers in New England who are too far from Boston to travel back and forth to the Flower Market. My twenty years' experience in the shipping of Cut Flowers should be proof enough of my ability to fill your orders to your entire satisfaction.

Assuring you that giving me your business will be to your advantage. I am

Very respectfully yours,

FRANK J. REYNOLDS.

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to any of the firms whose address is
here given will be promptly and prop-
erly filled and delivered.

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Boston—Zinn the Florist, Park St.

Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.
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St.

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Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th
St.

Cleveland, O.—Thé Smith & Fettes Co.,
735 Euclid Ave.

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Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

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Flowers Under Glass

It will be necessary to give the sweet peas a little heat from now on, but at the same time full ventilation must not be overlooked. Fall peas like an abundance of fresh air, yet they are impatient of draughts, and many a case of mildew can be traced to such a cause. Let the night temperature down to about 50 degrees for flowering peas, and later on it will be better to have it two degrees lower. Just at present the demand for sweet peas is not great. Indeed all other flowers are eclipsed for the time being by the ubiquitous chrysanthemum. Yet there is a certain call for them, and the demand will grow rapidly as the season advances. Watering is one of the things which must be done carefully and syringing will be necessary to keep down the red spider. It should be done early in the morning, however.

Apparently the Bouvardia is regaining much of its old time favor. In any event it is being shown very generally which is an indication that it is in demand as a cut flower. It has long been a question whether Bouvardias pay and the answer oftentimes depends upon one's particular locality. Growers must remember that this is a tropical plant and must have a low temperature at no time. They suffer from attacks of red spider and the mealy bug, but these pests are readily kept away by proper use of the hose. Fumigation is required for the red fly but the fumigation should be light, because Bouvardias are very easily burned, particularly at this season. Bringing as good price as they do in many markets, the Bouvardia is well worth the attention required to grow it.

A good night temperature for carnations at this season is from 48 to 52. In the daytime it may go to 60 if the weather is cloudy or 72 when the sun shines. Ambitious greenhouse men are sometimes tempted to give a little more heat with the hope of getting a few more flowers, but in the end this is poor policy, for the plants suffer from forcing. With the plants full of buds, a little top dressing of the soil will be an advantage. The beds often dry out unevenly. Watch for the dry places and apply water at once.

If you want to propagate some Crotons you can do it in the same way as rubber plants. Choose good shoots for the incisions and use toothpicks to

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keep them open. You don't have to use a big wad of sphagnum moss around the wound, but the moss must be kept constantly wet. In a month and perhaps less the moss will be filled with the roots at which time the tops can be cut off and potted up. This is a very good time of year to do this work. After the plants are started, keep them well watered, protect from sunshine and spray occasionally. Use soil, leaf mold and sand in equal parts for your potting soil. Just one other point,—you will need high temperature for best results when rooting Crotons.

Violets are flowers which demand a great amount of air, which means that the violet houses must not lack for ventilation. The proper use of air and water make the difference between success and failure in growing violets. While they like moisture at the roots, they rebel at a soil which is kept water soaked. Do not make your overhead spraying too heavy, and always do the work in the morning. Of course you will choose only sunny days for a general wetting down of the walks. Constant vigilance is certainly the price of success in growing violets, and it will be necessary to keep a close watch for insects or for black spots on the leaves.

It is easy to make mistakes in the use of water for many plants, and this is one place where experience counts very much. It is worth while to pay the price of good labor rather than to have damage done by green hands. Mignonette is one of the plants very easily injured by over-watering, whether in pots or on the benches. Too much water is also bad for Peperonias. They suffer much from being

kept too wet. Remember, by the way, that while Peperonias need shade in the summer, they can stand full sunshine at this season. While lilies like plenty of water, they can easily be given too much until they have filled their pots with roots. As a matter of fact, this applies to other bulbs, particularly to callas. Increase the water supply and the root and top growth becomes extended.

Keep the Stevias cool but at the same time have them on a light bench. It is only by keeping them cool and yet light that you will have robust, sturdy plants with fine spikes for the holidays.

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51 North Market Street

Boston, Mass.

GETTING UP STOCK OF IBOLIUM PRIVET IN A HURRY.

Oct. 29th, 1919.

Dear Sir:—The accompanying illustration shows a snapshot into the end of several rows of the new hardy hybrid privet, Ibolium. This is our stock bed of several thousand plants and it will be an eye opener to some of your readers to learn that this luxuriant growth is but one year old. Its height can be easily determined by noting the stake which appears in the illustration which is just three feet long, the bottom resting on the surface of the ground.

These plants are not only but one year old but have been cut back twice during the summer for propagation purposes. Just how this luxuriant growth was obtained in so short a time will naturally be of interest to the nurserymen generally throughout the country just now when so keen an interest is being taken in this new hardy hybrid privet and when so large a number are interested in getting up a stock of it with all possible haste. The feat is a simple one. When our

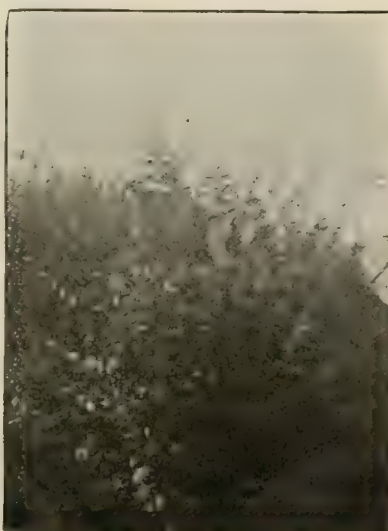
company a year ago decided to offer Ibolium Privet to the trade this autumn our stock was limited to the original plant, forty (40) three-year-olds and a few hundred one-year-olds. Just how to quickly get up a good size stock bed was a question before us. By cutting in our stock pretty well we obtained about two thousand buds. These were put in a block of two-year Amoor Privets two to four

buds to a plant. Practically all of these buds wintered and what you see in this illustration is the summer growth from these buds.

This block has not only furnished us with many soft wood cuttings for summer propagating, but is maturing a quantity of hard wood cuttings. Of course, we claim this is no special horticultural feat in fact, look upon it as an ordinary nursery practice, but notwithstanding this it will have suggestive value to many of those who are now going into Ibolium with the view of getting up a heavy stock of it with all possible haste.

When it is clearly realized that Ibolium Privet resembles California Privet very closely and is quite as hardy as Ibolium Privet its range of usefulness will be so extended that an enormous demand will result. Already through our advertisement of stock plants for propagating purposes there have come to our office many inquiries from those who misunderstood our advertisement asking for quotations on thousand lots, which indicate how quickly the general buying public are going to accept Ibolium Privet and what an enormous sale certainly will result.

THE ELM CITY NURSERY CO.
New Haven, Conn.



Ibolium Privet One Year Old

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A FLORIST'S OBSERVATIONS.

I wish I knew who had a good stock of ardisias. Here is a plant which should prove a money maker for florists and one which they can sell with all confidence, for there are few better houseplants. If you have a supply, large or small, by all means nurse the plants along. For the best development, they should always be kept near the glass. In the summer, it is well to shade the house on sunny days with cheese cloth or slat shutters. When the berries are well developed—about the first of October—they should be given plenty of sunshine, and they will also do with less heat, say 50 to 55 degrees. To help the berries and leaves to a color, soot water may be applied occasionally. Never allow the plants to become pot-bound, for unsightly "leggy" plants are liable to result.

I think there is no city in the country where autumn leaves are used so freely and so effectively as in the florists shops of Philadelphia. Combined with chrysanthemums they make as fine a window decoration as can be produced. In the spring, Philadelphia also runs to dogwood, and the generous way in which it is used always arouses admiration.

—FLORIST.

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- 1,318,583. Cultivator. Wesley A. Paul, deceased, Moline, Ill., by Lola V. Paul, administratrix, Moline, Ill., and John V. Holstein, Moline, Ill., assignors to Deere & Co., Moline, Ill.
1,318,920. Rotary Plowing-Cylinder. Chase C. Reed, Toledo, Ohio, assignor to The R. & C. Engineering Co., Toledo, Ohio.
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FRANK J. REYNOLDS CO. Wholesale Florists

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260 DEVONSHIRE STREET
BOSTON, MASS.

BILLBOARDS AND RAILROADS.

Wayne Junction, Philadelphia, Pa.

October 30, 1919.

Dear Sir:—When I first took hold of the Landscape Department of the Philadelphia and Reading Railroad System, about 30 years ago, the idea among the railroad men and the general public was then in its infancy. All we could do at first was to brighten up the station surroundings a bit, and then, as the years rolled by, we began to tone up or tone down the ugly spots along the line. By and by we discovered what an excellent thing it was to plant the edges, as wind-breaks, to prevent snow blockades and flooding. This not only beautified the landscape but it saved the company lots of money for labor cleaning the ditches. Other railroads both East and West soon began to see the advantages and began to imitate our good example until today it is the established custom of every first class line to have a properly organized Landscape Department.

I am now nearly seventy and have had experience from boyhood in practical gardening, floriculture and forestry, first in Europe and later in America, and I am proud to have been one of the first to found the new order of things among the railroads and to live to see it grow and blossom until we now may hold up our heads and show the old world that we aspire to a love of the beautiful in the new world as much as they do in the old, although there is a great deal for the rising generation to labor at, as they follow us older men on in the paths we have laid out for them.

This preamble is necessary so that you may understand my attitude on the billboard nuisance. I have been fighting these unsightly billboards of the "dollar hunters," as I have other defacements of natural beauty, all these years and none of them have ever been allowed anywhere near the tracks if I could stop them by "hook" or by "crook"—by word or by pen. Now you can imagine how it grieves me to learn that the florists, my own people, of all the people in the world, are starting in to spend money on this atrocity.

I earnestly urge upon them not to do it, but instead to turn in with all their might help me in my life work of educating the public to enjoying the beauties of nature. Away with all the billboards—beautify do not deface. I have been brought up in the com-

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264 RANDOLPH ST., DETROIT, MICH.*The House for Quality and Service***ZECH & MANN****We are Wholesale Florists Doing a Strictly Wholesale Business****30 East Randolph Street, CHICAGO**

mercial end of the business and have always been as keen for the dollar as the next one, but am thankful and proud that I have never earned one dollar in doing dirty or ugly work. Those who advocate this thing are doing great harm to the profession instead of educating the public up to the ideal of "Saying It With Flowers." Stop, while the stopping is good.

Yours very truly,

PAUL HUEBNER.

THE ARNOLD ARBORETUM.**The Sassafras in Autumn.**

In good years and bad years the Sassafras never fails to become a conspicuous object of beauty in October when its dark green leaves turn yellow and orange color more or less tinged with red. This statement gives little idea of the warmth of color which the

Sassafras produces when it grows, as it often does, on the border of a forest of oak trees on which the leaves are still green. The Sassafras is a handsome tree at other seasons of the year. In winter it is conspicuous by its deeply furrowed dark cinnamon-gray bark and bright green branchlets which in early spring are covered before the leaves appear with innumerable clusters of small bright yellow flowers. The leaves, which are sometimes deeply three-lobed and sometimes entire on the same branch, are not attacked by insects. The fruit is a bright blue berry surrounded at the base by the much enlarged and thickened calyx of the flower raised on a long bright-red stalk. Among northern trees only Magnolias produce such bright-colored fruits. There is little time, however, to enjoy the fruit of the Sassafras for birds eagerly seek it as it ripens.

NEWS AND COMMENTS

VISIT TO PENNSYLVANIA GROWER Many Houses Inspected by the Lancaster County Florists' Association

Thursday, Oct. 30th, opened up threatening rain and no prospect of that lost art, "seeing the sun," but in spite of this we gathered at the home of President Elmer Weaver via trolley and automobile and after seeing that all were provided with accommodations the start was made to West Grove, Chester County, picking up members and machines along the route until we numbered 48 at our last stop, Christiana.

Christiana is the home of M. J. Brinton, our Lancaster County lily king, and we spent a short time looking over his place, but found many of the lily houses empty as bulbs were not to be had to fill them. They will be filled up as fast as possible with narcissus, freesias and other bulbs, as well as lilies, the latter of which are beginning to come in. The carnation range is filled in good shape and has part of the space taken up with stevia, snapdragon and chrysanthemums.

The Conard & Jones place was our next destination and a full hour was spent inspecting what was new to many of our party—house after house filled with mail order stock, stock that will pay dividends to the buyer, and sent out under a system that makes errors of rare occurrence, all of which accounts in part for the large trade built up in this line.

With Antone Wintzer connected with the firm one of course expects to see cannas and we were not disappointed, the large number in the fields were about over their beauty, although they were still presentable, but a number of his seedlings were in boxes inside, and they plainly show his untiring effort and great skill in hybridizing. There were some twenty or more, all good, but among them are several that will make the name of Wintzer revered for generations to come.

Robert Pyle is of course the foundation head of this business and has an organization he can be almost as proud of as Mr. Wintzer can of his cannas. It was through Mr. Pyle that we were invited to make this trip as a delegation and for the remainder of the day he was our host with the assistance of Mr. Yeatman and Mr. Carey.

They piloted us to the immense new house built by the Richards Bros. This is in its second year and is filled with the best carnation plants we have seen this season, showing that a new house and new soil will produce results that the man with an older house and soil that has been growing carnations for a number of years cannot obtain, unless his place is big enough that he can get soil that is practically virgin for each season.

Howard Thompson's was next in line and here carnations were just a trifle behind the Richards Bros. Vieing with the greenhouses as an attraction to our party was the fine old Chester County homestead, making a perfect picture on the side of the hill.

Lawrence Thompson's had the usual number of carnation houses, a few houses of sweet peas and mushroom houses galore, all of which promise a revenue for the coming winter, with the mushrooms about 30 laps ahead of the greenhouses at the present time.

One of the lasting impressions of this trip will be the few varieties of carnations that are grown in Chester County. Of the places we visited Matchless, Mrs. C. W. Ward, Benora, Aviator and a few Sagamore were the list. In my boyhood days I remember a trip through this same section when from twelve to twenty varieties of carnation were to be found growing on a moderate sized place. Now one sees whole houses of one or two of the above varieties, showing the commercial trend of this business.

It was now getting close to one o'clock and appetites were keen, so a quick run was made to Kennett Square and 72 of us lined up for dinner at the hotel, our 48 as guests of the Chester County Florists' Club. We also had with us Mr. and Mrs. S. S. Pennock, Mr. Arthur Niessen and Messrs. Dennis Connor and Bates of the Lord & Burnham Co.

Grouped at round tables with a Chester County man or two to each, the dinner became a social event. After the coffee Mr. Robert Pyle acted as toastmaster, proving himself no novice in this position; after welcoming us as their guests in a manner that left no guess as to its sincerity, he called on Mrs. Albert M. Herr for a few remarks as a representative of the Ladies' Auxiliary. She in a few pleasant words gave our appreciation of the hospitality shown and asked every one present to boost the S. A.

F. & O. H. convention for Baltimore in 1921. Mr. M. J. Brinton, in his usual eloquent style voiced the sentiments of the men of our association, and short addresses were given by Messrs. Arthur Niessen, Elmer Weaver and S. S. Pennock followed by Mr. Wilkinson who bade us Godspeed for the Chester County Club.

Before leaving Kennett Square we visited the establishments of Wm. Swayne, who has the largest assortment of chrysanthemums in the state and whose houses are always a treat to lovers of this flower at this particular season of the year. A house of radishes planted between his snapdragons as a catch crop shows that greenhouse room has some value in his estimation.

Yeatman & Way had a wonderful house of tomatoes heavily set with fruit and the foliage good and healthy, top to bottom. They also grow sweet peas and mushrooms in quantity, a number of new hollow tile houses being added to their already large space given to mushrooms. Mr. T. K. Larkins is in the same line of business and as he is a member of the State Senate and has to spend considerable time in Harrisburg he has adopted a unique way of handling his establishment by giving 50 per cent of the net returns to his employees, instead of the usual weekly wage, and retains the other 50 per cent for running expenses and his own end of the business. This worked out very well last season.

Turning on our tracks we went back to Brandywine Summit and visited the establishment of the Harvey's. Here we found the old houses torn down and replaced with modern structures along the lines of their large house built several years back for sweet peas. Everything now is planted to roses and they will have 46,000 blooming plants this winter. Not having seen any other rose establishments for comparison we can not say that they are the best in the country, but there certainly could not be any much better; they are timed for a heavy holiday crop and unless I miss my guess the cut this season will run beyond the 800,000 they cut last winter.

Darkness prevented us from visiting any other establishments and the run home was made in good time, every one well pleased with the trip and ready to give three cheers and a tiger for the Chester County Club.

ALBERT M. HERR.

THE BOILER OF Unequalled Fuel Economy

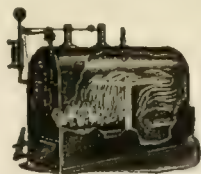
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(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

THE MARKET

The market is struggling with what seems to be an abundant supply of chrysanthemums, roses and carnations, also a mixture of outdoor stock.

The good grades of 'mums sell best—the very large varieties not so well and poor stock is difficult to dispose of. Pompons are in large supply and only the choicest are sought after. The demand for roses cannot be called brisk and as carnations, clearances are difficult even at low prices.

Cattleyas are in short supply so also are gardenias and valley.

Business is usually quiet election week and this is no exception to the rule.

Only a few of the best quality are salable at a price.

BOSTON.

The trade has learned with much interest that Frank J. Reynolds has gone into business for himself under the name of Frank J. Reynolds Co., wholesale florists. Stalls have been taken in the Co-operative Flower Market and will act as agent for several large growers. Mr. Reynolds, who has been

with P. Welch for several years, is one of the best known men in the trade, and his friends wish him all success in his new venture.

S. J. Goddard is shipping in some yellow cosmos which is exciting considerable interest. It is a decided novelty and should sell well when better known.

NEW YORK.

The two new roses, Pilgrim and Crusader, both developed by A. N. Pierson, of Cromwell, Conn., received silver medals at a private exhibition of plants and flowers held in the Museum of Natural History by the Horticultural Society of New York.

Mrs. Payne Whitney, of Manhasset, L. I., received three firsts for chrysanthemums.

A silver medal was awarded to pink rose, Frank W. Dunlop. It was exhibited by Charles H. Totty, of Madison, N. J. An orchid plant shown for Lager & Hurrell, of Summit, N. J., won a silver medal, while a gold medal for individual orchid flowers went to J. A. Manda, of West Orange, N. J. Mrs. F. A. Constable, of Mamaroneck, N. Y.,

received the first prize for fifty roses arranged for effect. The prize for the largest and best collection of vegetables went to Miss M. Valentine, of New Canaan, Conn.

Mrs. Payne Whitney, of Manhasset, received the silver cup awarded by Mrs. Herbert L. Pratt for the best table decorations of chrysanthemums in the Fifteenth Annual Chrysanthemum Show of the Nassau County Horticultural Society.

C. L. B. Ordway, who conducts the floral shop in the traction company waiting room on Union street, Olean, has announced that he will open a branch store in the Havens theatre block on West State street soon. The new store will be in the location now occupied by the Teacup. Mr. Ordway stated that he will continue to conduct his Union street shop, but that the increased business of the past year has made these quarters too small for handling all his trade.

A new flower shop has been opened by Joseph Trepel at Nostrand avenue and Sterling place, Brooklyn. This is the ninth of Mr. Trepel's establishments.

WHOLESALE FLOWER MARKETS—Trade Prices Per 100—To Dealers Only

	BOSTON Nov. 3	NEW YORK Nov. 3	PHILA. Nov. 3	CINC'I. Nov. 3	CHICAGO Nov. 3	PITTSBURG Nov. 3	BUFFALO Nov. 3
Roses							
Am. Beauty	4.00 to 30.00	3.00 to 30.00	20.00 to 60.00	10.00 to 50.00	12.00 to 50.00	8.00 to 40.00	5.00 to 50.00
Hadley	1.50 to 12.00	3.00 to 25.00	8.00 to 15.00	8.00 to 20.00	4.00 to 15.00	..... to .....	..... to
Hoosier Beauty	1.50 to 10.00	3.00 to 6.00	4.00 to 10.00	5.00 to 15.00	4.00 to 15.00	..... to .....	..... to
Killarney	1.00 to 10.00	2.00 to 6.00	3.00 to 8.00	5.00 to 12.00	4.00 to 12.00	4.00 to 15.00	..... to
White Killarney	1.00 to 10.00	2.00 to 6.00	3.00 to 8.00	5.00 to 12.00	4.00 to 12.00	4.00 to 15.00	..... to
Mrs. Aaron Ward	2.00 to 10.00	3.00 to 8.00	4.00 to 6.00	5.00 to 10.00	4.00 to 10.00	4.00 to 15.00	..... to
Mrs. Chas. Russell	4.00 to 10.00	3.00 to 20.00	10.00 to 30.00	6.00 to 20.00	6.00 to 25.00	6.00 to 20.00	..... to
Mr. Geo. Sawyer	2.00 to 12.00	2.00 to 6.00	..... to	6.00 to 20.00	4.00 to 12.00	..... to .....	..... to
Columbia	2.00 to 12.00	3.00 to 20.00	10.00 to 25.00	6.00 to 25.00	4.00 to 25.00	6.00 to 20.00	..... to
Maryland	1.00 to 8.00	2.00 to 6.00	3.00 to 8.00	6.00 to 12.00	4.00 to 12.00	4.00 to 15.00	..... to
Ophelia	1.00 to 10.00	2.00 to 10.00	3.00 to 10.00	5.00 to 15.00	4.00 to 15.00	4.00 to 15.00	..... to
Aspidium	.75 to 3.00	.75 to 1.00	1.00 to 1.50	1.00 to 1.50	..... to	1.00 to 2.00	..... to
Asparagus plum	.25 to .50	.25 to .25	..... to	25.00 to 50.00	50.00 to 75.00	40.00 to 50.00	..... to
Pom Pons	.50 to 1.00	..... to .....	..... to	25.00 to 35.00	.50 to 1.50	50.00 to 75.00	..... to
Bonaffon	1.50 to 4.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Calendulas	2.00 to 4.00	5.00 to 15.00	5.00 to 15.00	2.00 to 4.00	2.00 to 5.00	..... to .....	..... to
Carnations	1.00 to 4.00	1.00 to 3.00	3.00 to 4.00	3.00 to 8.00	3.00 to 6.00	8.00 to 4.00	..... to
Chrysanthemums	.50 to 5.00	4.00 to 35.00	10.00 to 40.00	10.00 to 35.00	15.00 to 35.00	15.00 to 50.00	8.00 to 40.00
Calla	1.00 to 4.00	..... to .....	..... to .....	..... to 20.00	.25 to .50	..... to .....	..... to
Ferns, Hardy	1.50 to 3.00	..... to	10.00 to 15.00	..... to 15.00	.15 to .20	..... to .....	..... to
Galax leaves	..... to 2.00	15.00 to 20.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Marguerite	1.00 to 2.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Narcissus	2.00 to 4.00	.50 to 1.50	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Orchids Cattleyas	75.00 to 125.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Orchids Cypripediums	..... to .75	..... to .....	..... to	15.00 to 20.00	20.00 to 25.00	..... to .....	..... to
Sweet Peas	1.50 to 2.00	1.00 to 1.50	2.00 to 4.00	1.50 to 2.00	2.50 to 3.00	..... to	1.00 to 2.00
Snap Dragon	.75 to 1.50	.50 to 1.00	4.00 to 10.00	4.00 to 6.00	..... to .....	..... to	4.00 to 6.00
Violets	1.00 to 1.50	.25 to .75	.75 to 1.00	1.00 to 1.50	.50 to .75	.15 to .75	.75 to 1.00

THE GARDENER'S SECTION

CHRYSANTHEMUM SOCIETY OF AMERICA.

The secretary of the Chrysanthemum Society of America has prepared a very interesting report of his work for the past year. It is as follows:

The Society having decided at its last annual meeting to hold the eighteenth annual meeting and exhibition in conjunction with the American Institute of the City of New York, the first work of the secretary for the year was the solicitation of the special premiums and the arranging of the special premium schedule which, through the courtesy of Mr. Wm. A. Eagleson, Secretary of the Board of Managers of the American Institute, was mailed to all members of the society.

During the season of 1918 there were submitted to the Examining Committees for examination forty varieties of which thirty-four were seedlings and six were sports of existing varieties.

Four varieties were offered for registration as follows:

Nov. 11, 1918—Variety Victory seedling—White Japanese incurred by Elmer D. Smith & Co., Adrian, Mich.

Nov. 22, 1918—Marie Louise—Bronze sport of variety Patty by The Davis Floral Co., Davenport, Iowa.

Feb. 7, 1919—January Gold—Golden Yellow sport of variety Mistletoe by The L. M. Smith Quality Flower Company, Laurel, Del.

Feb. 7, 1919—Dr. Hitch—White and lavender pink shading to yellow sport of variety January Gold, by The L. M. Smith Quality Flower Company, Laurel, Del.

The season of 1919, has been a good growing season for Chrysanthemums planted for commercial and exhibition purposes and many more have been planted than heretofore. The ravages of the insect pests is a difficult problem for the growers to overcome and is a subject that should receive consideration by the members of the Society, and the Chrysanthemum Society should have the support of all growers of Chrysanthemums to help find out the best methods of combating the many insects that now attack the plants. If the numerous Chrysanthemum grow-

ers of the country who have these difficulties to overcome will only co-operate with the Society, their co-operation will be of mutual benefit to themselves as well as to the members of the Chrysanthemum Society.

The routine work of the Secretary's office consisting of sending out statements to the members, recording the varieties disseminated, getting out the report of the Seventeenth Annual Meeting and the solicitation of special premiums was attended to in due season.

Your Secretary wishes to acknowledge the kindness of Mr. Elmer D. Smith in furnishing him with a complete list of varieties disseminated in 1918, which was a great help in getting up the annual report.

To the Examining Committees is due the appreciation of the Society for their very efficient work in the judging of the new varieties submitted to them.

The trade papers, as heretofore, very generously published all notices sent to them from time to time during the year for which we owe to them a vote of thanks.

Since our last meeting we have suffered a great loss through the death of Frank A. Friedley of Cleveland, Ohio. Mr. Friedley was a leader in all the trade activities of Cleveland and was in charge of a great deal of the work at the shows held at the time of our meetings there. He was also

formerly Vice-President of the Chrysanthemum Society of America.

A detailed report of all money received and paid over to the Treasurer accompanies this.

CHARLES W. JOHNSON, Secy.

Crataegus in the Arboretum

A few of the Old World Hawthorns produce fruit as large and handsome as any of the American species. The largest and handsomest is that of the Manchurian and Chinese *Crataegus pinnatifida* which is cultivated in orchards by the Chinese for its dark red fruits. Very beautiful this year is a variety of the European *C. oxyacantha* (var. *Gireoudii*) with thick, slightly lobed, dark green leaves and bright red, lustrous, short-oblong fruits half an inch in length. The branches of the small tree in the new collection of exotic Thorns on Peter's Hill are covered from end to end with fruit clusters which make it one of the most brilliant plants in the Arboretum this week. *Crataegus hiemalis*, a European tree of doubtful origin and by some authors considered a hybrid, is covered this year with is lustrous, dark wine-colored, ellipsoidal fruit half an inch long, drooping on long slender stems. More beautiful is a tree growing near *C. hiemalis* in the old *Crataegus* collection near the shrub collection with small deeply divided leaves and depressed-globose, shining, dark red-brown fruit three-quarters of an inch in diameter.

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RAMBLING OBSERVATIONS OF A ROVING GARDENER

Certainly *Lonicera Mackii* is a most useful garden shrub, especially for those garden makers who like to have a fine touch of color in the fall. Just now good specimens of this honeysuckle are clothed from top to bottom with a brilliant mass of red fruits, making them stand out most conspicuously. Although comparatively new, this shrub is now in commerce and well deserves wide planting. Even more interesting in a way is the newer *L. Mackii podocarpa*, which has a tendency to hold its leaves much longer than the parent type, and longer than most of the honeysuckles. Its red fruit contrast with the green leaves, giving it an unusual appearance. Doubtless this will come to be a popular shrub in future years.

Another honeysuckle of interest at this season is the climbing *L. Davidii*. Specimens growing in one end of the Arnold Arboretum shrub garden are in full fruit just now and have the odd characteristic of bearing a bunch of fruit at the center of each leaf. This plant excites no little interest both when in fruit and when in flower, its habits being different from those of plants with which most people are familiar.

It would be an amusing although possibly a somewhat desirable undertaking to devote a garden altogether to plants having some peculiar or unusual feature. I have thought that if I had the means I should like to do this, making a sort of real shrub museum. I would include the climbing honeysuckle just mentioned, and another vine, *Akebia lobata*, because of its curious fruit borne late in the season. This fruit is as large as a peach and has a beautiful shade of blue. It soon breaks open and drops its seeds, but even then is not unattractive because of its color effect.

Of course I would also have *Clematis tangutica*, although I would not train it on wires or on a trellis as is sometimes mistakenly done, but would

grow it over boulders or on a high wall. The special characteristic which would win it a place in my collection is its curious seed pods hanging from long threads and making it appear as though covered with so many wigs. Parenthetically I should like to say that the *Clematis* collection in the Arnold Arboretum is one of the least successful groups to be found there, owing to the fact that there is no suitable place for displaying the vines. Perhaps in time there will be a high brick wall against which the different species and varieties can be trained. Such a position would be most favorable because the plants would be sheltered from the wind.

To come back, however, to my shrub museum. I would certainly include *Euonymus alatus* because of its cork-like bark and the fiery tints of its fall foliage.

If there were room in my garden I would also include a specimen of *Phel-*

lodendron tree, the corky bark of which also makes it of exceptional interest.

Of course I would have *Euonymus bungeanus* and the newer *E. europaeus*, for no plants elicit more "Ohs" and "Ahs" at this season of the year. Truth to tell, these and some other species of *Euonymus* will come to be considered as among the most valuable of all garden ornaments, if I am any prophet. At this season when they are decked from top to bottom with scarlet fruits hanging by hairlike threads from rose colored capsules, they make a picture the beauty of which exceeds that of any other garden subject. Indeed, the majority of people do not realize that a plant possessing such superlative beauty can be grown here.

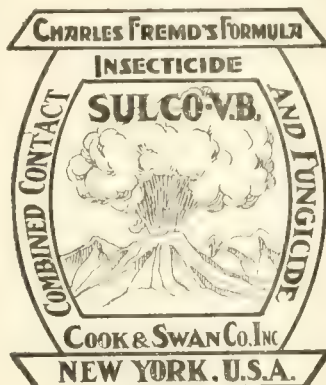
I think there would be a place in my garden museum for *Ligustrum vulgaris foliosum*, not because of any odd or curious quality, but simply for its tendency to keep its leaves as green as in midsummer until close to Thanksgiving when nearly all of its neighbors have become stark and bare.

Some of the *Magnolias* also keep their leaves very late, but I should include *Magnolia macrophylla* in my collection principally for its enormous leaves and its proportionately large blossoms. With leaves sometimes a yard in length and fragrant white



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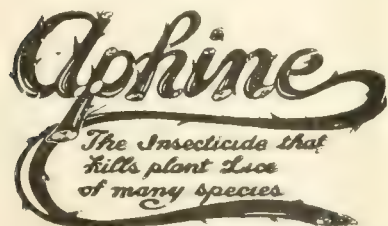
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flowers a foot in diameter, it certainly deserves a place in any collection of unusual plants. Without question it has the largest leaves and the largest flowers of any tree or shrub which will grow outside of the tropics.

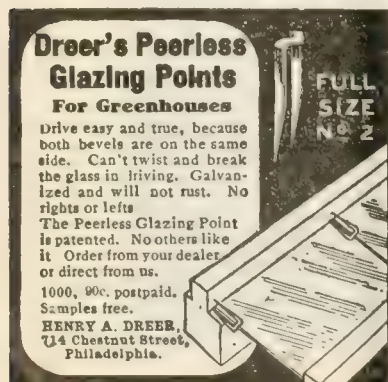
Naturally *Amorpha canescens*, the Leadplant of the west, would have a place in this unique collection for its curious gray foliage and equally curious flowers differentiate it from any other garden occupant. Mr. Horsford, of Charlotte, Vermont, is the only nurseryman listing this shrub so far as I know, and he says that he can grow it better than he can sell it, which fact is probably due to the ignorance of the general public in regard to the remarkable qualities of this native shrub.

I should put in the Bladder Sennas for the strange fruit which gives them their name, and the various red and yellow stemmed dogwoods which always stand out conspicuously against the winter snows.

Gordonia alata would also have a good position if I could find a nurseryman selling the plants. Displaying its Camellia-like flowers as it does in October, when most of the garden has yielded up its beauty to the frost, it is a plant of unusual and most excellent qualities. I would have the *Callicarpus*, too, if I could get them, which I am afraid I couldn't, for their fall fruits, deep violet in color, are distinctly different from those of any other shrub which grows, and exceedingly ornamental. It would seem, by the way, as though the fruiting branches of this shrub would sell very readily if displayed by the florists, for they are even handsomer than the red berries of the black alders which are so common now.

Then there would be the Japanese Witchhazels, and the native Witchhazel, *Hamamelis vernalis*, from Missouri. Flowering as they do in the dead of winter, these plants are among the most remarkable of all our garden subjects.

Even with a list no longer than the one I have given, it would be possible to maintain a garden museum which would be the delight of all who might choose to visit it. To be sure, all of these plants are to be found in the Arnold Arboretum, and many of them, no doubt, in other public collections, but I know of no private garden where an attempt has been made to carry out any such plan as I have indicated. Perhaps it wouldn't be feasible or worth while, but in any event it would be interesting both to the man who does the work and to those privileged to see the results.



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DUTCH AND OTHER BULBS

Of the following offered stock the DUTCH BULBS can be shipped at once—the others as they arrive. All prices are understood packed and F. O. B. cars or steamer New York.

U. S. GROWN BULBS

NARCISSUS EMPEROR, double nosed, XXX selected for forcing	\$36.00 per 1,000
NARCISSUS EMPRESS, double nosed, XXX " " "	36.00 "
In lots of 10,000 or more, both varieties.....	35.00 "

October delivery. These are large bulbs selected for forcing.

DUTCH BULBS

"D. N." means double nosed. Tulips are sold only in multiples of 250, Hyacinths in multiples of 50, Miniature Hyacinths in multiples of 100—as they come that way in bags we cannot break bags.

SINGLE EARLY TULIPS

Rose Gris de Lin	\$24.00 per 1,000	Vermillion Brilliant	\$47.50 per 1,000
Yellow Prince	32.00 "	Prosperine	46.75 "
White Swan (True).....	30.00 "	Mon Tresor	46.75 "
White Hawk	30.00 "	Coleur Cardinal	48.50 "
Duchess de Parma.....	30.00 "	Flamingo	50.00 "
Prince of Austria	35.00 "		

DOUBLE EARLY TULIPS

Snow Ball	\$24.00 per 1,000	Couronne d'Or	\$47.00 per 1,000
Murillo	30.00 "	Imperatur Rubrorum	50.00 "

DARWIN TULIPS

La Candeur	\$26.00 per 1,000	Gretchen	\$29.00 per 1,000
Glow	37.00 "	Baron de la Tochnaye.....	25.25 "
Madam Krelage	33.00 "	Suzon	30.00 "
Erguste	33.00 "	William Copeland	59.00 "
Massachusetts	31.00 "		

NARCISSUS

Empress (D. N.)	\$42.50 per 1,000	Poetaz Louise	\$30.00 per 1,000
Victoria (D. N.)	50.00 "	Sir Watkin (D. N.)	35.50 "
Emperor (D. N.)	42.50 "	Dbl. Von Sion (D. N.)	42.50 "
Poetaz Alsace	26.50 "	Glory of Leiden	39.00 "
Poetaz Irene	42.00 "	Barii Conspicuous	24.00 "

HYACINTHS

Your selection of following varieties, 1st size 17-18 c/m	\$85.00 per 1,000
La Victoire	Queen of the Blues

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Your selection of following varieties, 12-14 c/m.....			\$35.00 per 1,000
	Ruby	Alida Jacoba	
Johan	Roi des Belges	Lord Macauley	
Heroine	Gr. Vainqueur	Lord Balfour	

CAN ALSO OFFER

FOR later delivery—BEGONIA and GLOXINIA BULBS, JAP. LILY BULBS.

Write for prices, stating specifically what you require

TERMS OF PAYMENT 60 days net, less 2% cash 10 days from invoice date. Cash with order from those who have not established credit with us. All stock is offered subject to prior sale.

McHUTCHISON & CO., *The Import House,* **95 CHAMBERS ST. NEW YORK**

HORTICULTURE

Vol. XXX

NOVEMBER 15, 1919

No. 20

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.



POM PONS

In endless variety, all colors, the better commercial kinds, well grown splendid quality.

\$3.00, \$4.00, \$5.00 per doz. bunches.

SWEET PEAS—Pinks, Whites, and Lavenders, unusually choice for this time of the year.

\$1.00, \$2.00, \$3.00 per 100.

CHRISTMAS GREENS—Write for list.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.
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FERNS

THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we **RECOMMEND IT MOST HIGHLY.**"

Strong plants, 2½-inch pots.....\$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots..... 7.50 per dozen, 50.00 per 100
Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:	Each
Elegantissima, elegantissima compacta, and Muscosa, 2½-inch	\$0.35
Elegantissima and elegantissima compacta, 6-inch	.75
Muscosa, 6-inch	.75
Elegantissima and elegantissima compacta, 8-inch	2.00
Elegantissima and elegantissima compacta, 10-inch	4.00
Harrisii, 8-inch	3.00
Dwarf, Boston, 8-inch	2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown. N. Y.

FERNS

We have an excellent lot of pot grown Boston and Scottii Ferns ready for an immediate shipment before cold weather sets in. The following price will hold good during November. Shipped without pots.

Size	Doz.	100	1000
3 inch.....	\$1.00	\$ 8.00	\$ 75.00
4 inch.....	3.00	20.00	190.00
5 inch.....	4.50	35.00	325.00
8 inch, \$1.50 each.			

ALTERNANTHERAS, Alyssum, Double Giant and Dwarf, **Begonias** Gracilis and Vernon mixed colors, **Coleus** Standard sorts, **Hardy English Ivy**, **Lantanas**, assorted, **Heilotope**, **Lobelia**, Crystal Palace Gem, **Moonvines**, 2-in. \$2.75 per 100.

Send for Catalogue Cash With Orders

R. Vincent, Jr., & Sons Co.

WHITE MARSH, MARYLAND

Henry H. Barrows FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTTY CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.
ADRIAN, MICH.

Snow Queen Canna

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The CONARD & JONES CO. WEST GROVE, PENN., U.S.A.

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Simple method of correct accounting especially adapted for florists' use.

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HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 415, DUNDEE, ILL.

E. W. FENGAR CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

Flowers Under Glass

If you are growing Ixias don't make the mistake of trying to hurry them along at a high temperature. Probably the number of Ixias being forced is very small this year, but those who have them will undoubtedly make a profit, as they are excellent either for cut flowers or for decorative purposes.

The big demand for Cyclamen is bound to make this one of the most valuable of the season's plants. Almost anybody can grow Cyclamen of a sort but it takes experience and skill to turn out first-class specimens. For one thing, the houses need to be kept reasonably moist, which can be accomplished by dampening down the walks night and morning. Keep the plants near enough to the glass so that they will grow stocky. Avoid overhead watering and apply all water early enough so that the plants will be dry by night time. Fifty to fifty-five degrees is about right for night temperature. Many growers are crowding Cyclamens a little now because of the demand for space made by mums. For that reason frames may be used a little while longer. Make room for the Cyclamens as soon as the chrysanthemums are out. They will repay all the attention you give them this year.

In growing your Poinsettias try to find the happy medium in watering. There is always danger of using too much water or of allowing them to dry out too much, with the result that the foliage turns yellow. If you have plants that are not developing as they should, give them a night temperature ranging from 65 to 70 degrees. More matured plants should be kept cooler.

With bulbs at this year's prices they should not be neglected in any way. You may be rushed with Christmas preparations, but find time somehow to get in your Narcissi, Hyacinths and Tulips. You can leave the bulbs outside for three weeks longer, after which they should be brought in and stored under the bench in a house where the temperature runs 50 to 55 degrees. For forcing tulips you need strong top heat with only a mild heat at the roots. Let the temperature run up pretty well but see that the plants are kept moist at the roots.

You should have a good stock of Mignonette now. Rub off the laterals except three or four strong side shoots on the bottom that will give you a second crop. Remember that it takes a

NAMED HYACINTHS

Top Bulbs

BEDDING HYACINTHS

First Size, Separate Colors

FREESIA PURITY

3/4 INCH UP

Prices on Application

J. M. THORBURN & CO.

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NEW YORK CITY

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SPECIALIZE IN

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(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or Forward

Only Address, LANGPORT, Eng.

DUTCH BULBS PAPER WHITES JAPANESE LILIES

Write for prices

AMERICAN BULB CO.

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Burpee's Seeds PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

THOMAS J. GREY COMPANY

SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL

Reselected Strains in Seeds
Improved Styles in Implements
Catalogue upon Application

16 So. Market Street
BOSTON, MASS.

INSTRUCTION IN GARDENING

Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden
Bronx Park NEW YORK CITY

cool house to produce strong spikes. This means that the night temperature should not go above 45. It will pay to make weekly applications of manure water after the plants begin to grow.

THE ARDMORE SHOW.

Excellent Exhibit of Chrysanthemums and Dahlias.

Half a dozen debutantes, members of the Chrysanthemum and Dahlia families, made their first bow to the public when the Pennsylvania Horticultural Society presented the season's new floral buds at its annual exhibit in Masonic Hall at Ardmore.

The Jenny Wren, a feathery, pink-purple dahlia, was much admired. Jean Kerr, white as a snow flake, and The Bride, a little white dahlia with a golden heart, were among the loveliest of the new flowers.

Rare chrysanthemums from the Joseph E. Widener gardens and the Japanese varieties from the George H. McFadden estate were on display. Countess Mildred von Holnstein, exhibiting for the first time this year, sent several varieties of carnations. Mrs. George Drexel W. Childs and Mrs. Frank Thomson were among the prize winners in the chrysanthemum class.

The "center-piece" of the showroom, a giant bouquet, towering ten feet above the modest little dahlias, won first prize in its class for Joseph E. Widener. It was composed of six varieties of chrysanthemums—purple, white and yellow and crossed color tones—with a background of autumn leaves and grasses. Equally imposing was the immense "shower bouquet" of yellow blooms—eight hundred of them which won the Pembroke prize for George D. McFadden. A cluster of twenty-four blooms, eight distinct varieties, took first prize for the Widener gardens, and another blue ribbon was pinned to a Widener display of eight giants in the standard colors—white and yellow.

Mrs. Charles L. Willoughby, who owns a Summer mansion on Winslow street, Plymouth, Mass., has purchased three large dwelling houses on the westerly side of the street adjoining her property. They will be torn down, and the land added to her estate. It is reported that an Italian garden will be built there.

The Wellesley, Mass., Flower Shop pasted the newspaper clipping in which Richard J. Hayden advocating, wearing a pompon 'mum for Armistice Day, in its window and beside it fastened a 'pom to drive the suggestion home.

HIGHEST GRADE BULBS

FOR IMMEDIATE DELIVERY

HYACINTHS, Single Size 17 to 19 cm NAMED VARIETIES					
	Quan.				
	per case	100	1000		
5000 Grand Maitre, porcelain blue	1600	\$7.50	\$60.00	2500 Lord Kitchener (Kaiser Kroon)	22.00
2000 Perle Brillante Improved Grand Maitre	1600	7.50	60.00	5000 La Reine, pure white, shaded pink	22.00
8000 Gertrude, bright pink	2000	7.50	60.00	2500 Rose Grisdell, delicate pink	22.00
6000 L'Innocence, pure white	1500	7.50	60.00	2000 Vermillion Brilliant	35.00
				2000 Prince of Austria, orange scarlet	28.00
TULIPS DOUBLE EARLY TULIPS				NARCISSUS GUERNSEY STOCK	
			1000	Blooms earlier than Holland Bulbs	
5000 Couronne D'Or, orange yellow			\$32.00	1000	
5000 Tournesol, red and yellow			34.00	5000 Narcissus, Emperor, large size	\$30.00
SINGLE EARLY TULIPS				7000 Narcissus, Sir Watkin, first size	30.00
5000 Artus, bright scarlet			\$20.00	3000 Grand Primo	28.00
5000 Belle Alliance, scarlet			22.00	YELLOW CALLAS	
5000 Chrysolora, finest yellow			22.00		100 1000
5000 Cottage Maid, soft pink			22.00	Yellow Callas, size 1½ to 1¾ inches	\$20.00 \$175.00
5000 Cramoisi, brilliant extra red			22.00	Yellow Callas, size 1¾ to 2¼ inches	25.00 200.00
5000 Gold Finch, pure yellow			22.00	Godfrey Calla Roots, 2¼ to 3 inch circ.	20.00

C. U. LIGGIT, Office 303 Bulletin Bldg. Philadelphia, Pa.

IBOLIUM

THE NEW HYBRID

HARDY PRIVET

(L. Ibota x Ovalfolium)



Natural Habit

Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery. The Elm City Nursery Co., WOODMONT NURSERIES, INC., New Haven, Conn. Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.



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We are Headquarters for the BEST OF EVERYTHING IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS

of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for future delivery.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg. Boston, Mass.

IF in need of RELIABLE NURSERY STOCK

that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**

Wholesale and Retail

NORTH ABINGTON, MASS.

NOW FOR THE HOLIDAY TRADE

Order plant stock while the supply is good and shipping can be done with less damage and expense.

Extra heavy ADIANTUM HYBRIDUM, 6-in., \$75.00 per 100

Extra good CHATELAIN BEGONIA, 2½-in., \$7.00 per 100, \$65.00 per 1000. 3-in., \$12.00 per 100.

CALENDULA Orange King, the O. K. strain. The result from a number of years of greenhouse selecting. If you want the best let us supply you. \$5.00 per 100, \$45.00 per 1000.

BIRD'S NEST FERN. Excellent stock, 2½-in., \$18.00 per 100; 3-in., \$27.50 per 100.

FERNS

Nephrolepis, Verona, Dwarf Boston, Scottii, Elegantissima, Teddy Jr., Roosevelt

POT-GROWN 100
2½-in. \$12.50
4-in. 50.00

BENCH BOSTONS
Ready for 4-in. pots, \$50.00 per 100.
PTERIS Wimsettii and Victoria, 3-in., \$16.00 per 100.

PTERIS Rivertoniana. 3-in., \$20.00 per 100.
The above are especially fine—ready for 4-in. pots.

FERNS for fern dishes. As- 100 1000
sortiment of best sorts,
2½-in. \$6.00 \$55.00
3-in. 12.00

KENTIA Belmoreana. Strong Doz. 100
2½-in. \$1.50 \$12.00
3-in., \$25.00 per 100. 4-in., 50c. each

IVY, English. 3-in., \$8.00 per 100.

CINERARIA

Selected strain, 2½-in., \$7.00 per 100; \$65.00 per 1000.

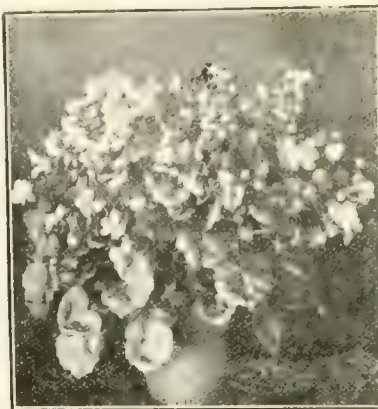
WINTER FLOWERING FORGET-ME-NOT. Best Boston Market Forcing Strain. \$7.00 per 100, \$65.00 per 1000.

SNAPDRAGON. Ready now. Nelrose, Silver Pink, Enchantress, Keystone, Phelps White and Yellow, 2½-in., \$6.00 per 100, \$55.00 per 1000.

BEGONIA MRS. M. A. PATTEN. Dark sport of Chatelaine. Buy now and have them ready for Xmas. 2½-in., \$10.00 per 100.

Boston Yellow Marguerite

We offer a carefully selected strain, grown by a specialist in this line and furthermore send out no blind plants. They are worth the price. 2½-in., \$10.00 per 100; 5½-in., heavy blooming stock for quick results, 50c. each.



BEGONIA. A good offer in Melior and Cincinnati. Strong, bushy plants from leaf cuttings. 3½-in. ready to repot in to 5-in. at 50c. each. 2½-in. from top cuttings, strong plants, 25c. each.

CYCLAMEN. Blood red, salmon, crimson, white carmine eye, 4-in. ready for 5-in., 50c. Big, fancy plants in 5-in. pots at \$1.35 each.



SIM'S YELLOW POLYANTHUS

THE BEST ON THE MARKET

Winter flowering clumps ready now.
\$8.00 per 100 - - - \$75 per 1000

Asparagus Plumosus Seed

Massachusetts greenhouse grown,
1000 \$3.00; 5000 \$13.50.

Coeleus Trailing Queen

Fine for mixed pan, basket and hamper work. 2½-in., \$6.50 per 100, \$60.00 per 1000

TWO NEW FERNS NEPHROLEPIS MACAWII

A Winner

2½ in., \$20 per 100.

THE VICTORY FERN (Nephrolepis Victoria)

Bronze Medal at Detroit.

	Per Doz.	Per 100
2¼ in. pots.....	\$3.00	\$20.00
3½ in. pots.....	7.50	20.00

OTAHEITE ORANGES, for growing on, 2½-in., \$20.00 per 100.

LATANIA Borbonica, Fan Leaf Palm, 3-in., \$30.00 per 100.

ARECA Lutescens, 2½-in., single plants, \$15.00 per 100; 2½-in., made up three plants to the pot, \$20.00 per 100.

	100	1000
ASPARAGUS Plumosus, seed- lings	\$8.00	\$8.00
2½-in.	\$5.00	45.00
3-in.	10.00	
Sprengeri Seedlings.....	7.00	
Sprengeri, 2½ in	5.00	45.00
3-in.	10.00	

CHRISTMAS JOY PEPPER. Heavy, 4½-in. pots, \$30.00 per 100. Well set with Berries and colored. A Bargain.

Crotons

Nice 2½-in. plants. Get your stock now and be ready for your mixed pans and hampers for the holidays. A good assortment of highly colored sorts both broad and narrow leaf types. \$35.00 per 100.

Dracaenas

Godsefiana, Sanderiana, Lord Wolseley, Kelleriana and Terminalis. They are highly colored and just right for mixed pans and hampers for the holidays. You will save money by getting them now. Strong, 2½-in. pot plants, \$25.00 per 100; 3-in., select stock, \$40.00 per 100.

GYPSOPHILA SEED (Nicholson's Forcing Strain)

Earliest and Best

¼ oz., \$50c.; ½ oz., 85c.; 1 oz., \$1.50

GIGANTEUM LILIES

We still can supply ALL SIZES.

Let us quote you RIGHT PRICES on best quality and amount you want.

Next lot due now. Ask us about special offer on 6½-7 size. It will interest you.

Easter Sunday (1920) falls on April 4th

Let us quote you on Ramblers and Baby Ramblers. One year old plants, excellent for growing on. We have the best sorts and in quantity.

10,000 Hydrangeas. Otaksa and best French sorts. 3-inch, \$12 per 100; 6-inch, heavy, \$40 per 100; 7,000 2½-inch at \$7 per 100, \$65 per 1,000.

Pelargonium Easter Greeting, also mixed, including four best sorts, 2½-inch, \$12 per 100. 500 White Baby Rambler Catherine Ziemet, forcing stock, immediate shipment, \$30 per 100.

Cash or satisfactory trade references.

No C. O. D. Shipments.

L. J. REUTER CO. Plant Brokers

15 Cedar St., Watertown, P. O.
BOSTON, MASS.

HORTICULTURE

Vol. XXX

NOVEMBER 15, 1919

No. 20

THE TALK OF THE TRADE

The commercial value of the very early chrysanthemums which made their appearance in the Chicago market last year in August, as compared to this year when the early varieties came in much later, is being tested because of circumstances beyond their control and not through any will of the growers. In both years the quality of the stock was considered good for early flowers. Last year the market could not be said to be ready for chrysanthemums in August and many had to be sold at a low price. Later on the extreme demand, owing to the influenza brought prices up to where the early sales showed to still greater disadvantage. A normal chrysanthemum season in Chicago is about ten weeks. This year the season will be much shorter, some growers anticipating only seven weeks.

Wholesalers whose years of experience make their opinions of much value, say the best results generally are obtained when Golden Glow appears about Sept. 10 while others put the date Oct. 1st. So far nothing has appeared to rival that splendid early variety Golden Glow, originated by Elmer D. Smith, of Adrian, Mich., and which growers declare has lost none of its vigor with the years. When that time comes, if ever, let us hope Mr. Smith will have another one to take its place.

Why can't we have a little advice and information from the expert plant growers regarding the various troubles which are met with in growing cyclamen? Cyclamen is without doubt the most popular Christmas plant. It is grown in increasingly large numbers every year and is better liked by the buying public than ever before. It is a difficult plant to handle nevertheless, and from the time the seed germinates until a few weeks before marketing the grower is going through a series of troubles such as club root, mite, thrip and fungi diseases. Few growers find steady success; some do wonderfully well a few years and then for a few years they fail. Why don't some of you cyclamen growers who have gone through these troubles give the other fellow a few words regarding your experience and suggestions in fighting these difficulties? We all read about

the troubles of the chrysanthemum and the rose, and the growers handling those crops are certainly benefited through an exchange of views. Let us get together and see if we can't do something for the cyclamen growers.

Another fine Christmas plant is *Erica melanthera*, probably the easiest of the *Ericas* to grow and also probably as satisfactory as any. Some growers carry their stock through the summer in the field, lifting them in September and then keep them in a close temperature for two or three weeks. When potting, it is recommended by one very successful grower that the soil be crowned high above the edge of the pot. This avoids the danger of over-watering. As everybody knows, red spider is particularly fond of *Erica*, consequently continued syringing is necessary and unless the soil is high and will permit the water to run off instead of staying in the pot, a serious condition will exist which the *Erica* will not stand. They do not want to be overwet at the roots. This idea will work out nicely providing, however, that before sending the plants to the stores the soil is rimmed out, as when the plants get into the private homes they are not apt to be overwatered and there must be some room to take care of the water necessary in the home. In order to keep

any plant popular, care must be taken to turn them over to the customer in such a way that they have a fair chance of living and doing well in the house.

I have heard a number of comments from different fern growers to the effect that the new Fern Macawii could not be a sport of Scottii. Thinking this would be a matter of interest, I decided to write to Macaw Bros. and they answer as follows:

"It is a sport of Scottii. We have had several sports of Teddy, Jr., something like it but not near so good, all of which we have discarded. We have seen one or two other sports around Philadelphia just like some of the ones we discarded. They were much slower in growth and not quite so much crest to the frond nor so strong. You speak of some of the growers not thinking it possible to be a sport of Scottii. I don't see that there is anything impossible about it, when crested varieties have sported from the plain-leaved types."

Samuel F. Lilley has sold out his interest in the Chalfont Cut Flower Co., Chalfont, Pa., to Peter Hellberg. Mr. Hellberg is now the sole owner of the company which has about 18 acres of land and a nice range of greenhouses at this point which is considered one of the best locations in Bucks County for carnations, sweetpeas and similar crops.



Ericas in Five-inch Pots

TAKING ORDERS FOR BILLBOARDS

This Feature of S. A. F. Campaign Now Under Way

At last the arrangements for the issuance of the proposed billboard carrying the slogan "Say it with Flowers" have been completed, and our Promotion Bureau is ready to take orders. A sample billboard was set up at the recent meeting in Buffalo of the Florists' Telegraph Delivery Association, and it appeared to meet the approval of all present, so much so that, altogether, orders are in for eighty-seven of these beautiful signs.

The contract which the Publicity Committee has been able to place makes it possible to deliver a billboard at any railroad station in the United States for \$50, freight paid to destination. A similar billboard ordinarily would cost at factory \$90, so the great saving effected through our contract is obvious.

Any florist who has or can control a site suitable for the display of one of these boards is urged to place an order for one at once. Besides helping the Campaign he will be helping himself, for he will be permitted, should he so desire, to hang a supplementary sign beneath the regulation billboard calling attention to his own establishment.

The sign is 20 ft. long and 7½ ft. wide, and is in appearance similar to the sign shown in our illustration. The construction is of 26 gauge galvanized iron, on wood frame, and shipped in

four 5 ft. sections, with face bands. The board weighs, approximately, 250 to 300 lbs. The slogan will be painted to conform in design and color to the regular glass and transfer signs supplied by our Promotion Bureau. Three coats of paint are used, with one coat of heavy outside wearing varnish applied after the last coat of paint is dry. The back of the board is painted with one coat of pure oil black. The wooden supports, as shown in our picture, are not supplied, but they are of a nature to be easily procured locally. A blue print, or drawing, detailing the construction and method of setting up is to be furnished with each billboard. As sent out, a sign should remain in good condition for many years.

Without doubt, a large number of florists will wish to take advantage of this opportunity to bring our industry prominently before the public. As has been pointed out frequently, the florists are fortunate in that so many of them are provided with sites that cost them practically nothing for a display of this kind—along much traveled highways, railroad tracks, against potting sheds and outbuildings which are in public view, and often in cities on tops of buildings, in connection with their store buildings, or on adjacent vacant lots. If a small body of men could, extemporaneously, as at the meeting in Buffalo, offer to take eighty-seven billboards, to cover so many sites, what numbers of locations must be generally available? The Publicity Committee is confident that orders will quickly be forthcoming which will insure the erection and display of a thousand billboards. The price a mere

bagatelle when the value of the material and service is considered. There is much to be said in favor of outdoor publicity, especially when applicable to the subject of our Campaign. One thing is certain—never was an opportunity for helpful and direct publicity ever presented at such little expense as that now presented to the florists. The Secretary would be pleased to hear from all those who can take advantage of the offer here made. Simply send in the order for a sign, accompanied by a cheque for \$50, and the sign will be promptly delivered at any designated railroad station.

A New Kind of Publicity.

The value of our slogan "Say it with Flowers" has been recognized in a direction quite apart from the course of our Campaign. Just as the writers of fiction and sentimental prose are frequently using it in their work when they wish to convey a thought as to an easy method of expressing feeling, the song writers have seized upon the line as a title for a song. All who were at the Detroit Convention had the pleasure of hearing one such song, but it does not seem to have got into the realm of publicity. Now a prominent song publisher of New York is introducing to the public a similar song, of great merit, in Fox Trot measure, and is employing singers of high order to exploit it. The first exploitation was in Detroit during the past week. Harry Breitmeyer, of John Breitmeyer's Sons, writes the Secretary as follows, in regard to it; "This week Miss Grace LaRue is featuring the song at our Temple Theatre. The Detroit florists have each taken one day to send Miss LaRue flowers, as well as to place vases of flowers in the theatre lobbies. I assure you it has made a hit with theatre goers, and "Say it with Flowers" is the talk of the public. The song is a wonder. If



A "Say It With Flowers" Billboard

New York and other cities have the opportunity to receive these benefits I would recommend your hearty co-operation." It is understood that the song is to be a feature in the prominent theatres of Chicago, Cleveland, Cincinnati and other large cities upon the circuits of the singers, with suitable stage settings, and it is expected that phonograph records of it, carrying the voice of a leading concert artist will shortly be available. Wherever the song is to be featured, the florists situated locally are urged to co-operate with the theatre management in the making of an appropriate floral setting. It is also suggested that special window trims in the florists' stores be made during the continuance of the feature.

Support the Campaign Now.

Subscriptions to the Campaign Fund are now most urgently needed. Our Publicity Committee has accomplished much, but it can do more if supported as it ought to be. Our slogan is an out-and-out success already, and it is absolutely necessary that we build upon this success if we are to make "Say it with Flowers" a household phrase. This attainment is within reach, easily—if the big army of non-subscribers will "come across." It is such a little support we are asking individually that there need be no hardship entailed. A small cheque from the many will make up a goodly aggregate, something we can work with. Many florists every week expend more on unproductive matters than they need contribute to the Campaign. Surely it is not a question of stinginess that stands between the success of our movement and the support which we have a moral right to expect in an industry whose members have always been noted for their generosity and liberal mindedness in all things. Rally now, chip in and help.

JOHN YOUNG, Secy.

1170 Broadway, New York
November 8, 1919.

DEPARTMENT OF PLANT REGISTRATION

Public notice is hereby given that Frank D. Pelicano, 119 Guttenburg street, San Francisco, Cal., submits for registration the new plant mentioned below:

Adiantum Pelicanii, a seedling of *Adiantum Roenbeckii*, which it resembles in habit, being very light in color and of vigorous growth; fronds grow erect, and average from 20 to 24 inches in length.

William W. Edgar Co.
FLORISTS

WAVERLEY, MASS.

"THE HOUSE OF SERVICE"
Call Belmont 600

SEASONABLE FLOWERING PLANTS

Cyclamen, Begonias, Primulas, Chrysanthemums, Peppers, Jer. Cherries, Paper Whites, etc.

Visitors Always Welcome

Any person objecting to this registration, or to the use of the proposed name, is requested to communicate with the Secretary at once. Failing to receive objection to the registration, the same will be made three weeks from this date.

JOHN YOUNG, Secretary.

1170 Broadway, New York.
November 8, 1919.

A WARNING FROM THE F. T. D. A. CLEARING HOUSE DEPARTMENT.

At the recent meeting of the Board of Directors it was the sense of the meeting that more drastic action was necessary to bring habitual slow paying members to the realization that payment must be made according to our constitution and by-laws—Article 11—Sections 6-10 inclusive, which fully explains the duty of the Secretary relative to back due bills. Disputed bills, of which many are received at the Clearing House, shall be disposed of either by the Secretary or through the regular Arbitration Committee.

The association has grown too large and its responsibilities too great to allow some members to have their names perpetually on the Clearing House records. It is bad business and should be overcome. Always keep this slogan in mind "Say it with Flowers—at the end of 30 days—Say it with a Check."

The Secretary does not care to use his official prerogative unless it is absolutely necessary. Leniency has always been practiced to those who have shown any tendency toward bitering or improving their business standing. The truly unfortunate one will always receive courteous treatment, providing they can and will prove to this office that their case is one of misfortune. We have been bitterly criticised many times for not exercising and fulfilling the exact meaning of the by-laws. The time has come when the provisions of the by-

laws relating to the Clearing House will be executed.

Yours for more F. T. D. A. co-operation.

ALBERT POCHOLON,

Sec'y F. T. D. A.

P. S.—All members who have been officially warned to settle all back due bills and failed to do so, will find that their names will not appear on the 'Xmas membership list, which will be issued on or about December 10.

BRIDGEPORT'S FINE NEW GREEN- HOUSES.

A modern greenhouse at Beardsley Park, Bridgeport, Conn., has just been completed and is now operating. It is a Park Board project, actively superintended from start to finish by Commissioner Wesley F. Hayes. Mr. Hayes entertained newspapermen at the plant yesterday on an inspection trip.

The greenhouses are described as "the very last word" in conservatories. Every item of construction and equipment is of the most modern type and the plant is adaptable for each phase of the florist's work.

The main building is of two stories with basement. The entrance already is graced by ferneries and rare birds are on view in cages. The work room is ample and well equipped. There is storage for 50,000 earthen pots, for tools and other equipment. One room is fitted for the office of Park Superintendent Henry J. Cliffe, an expert florist, who will be in direct charge.

On the second floor is the resident florist's quarters. The greenhouse runs Southerly from the main building, which is so planned as to enable doubling the "under glass" section if future requirements demand. Curved eaves and a non-freezing gutter, best ventilating devices and heating controls mark the structure among its kind. Cold frames run the full length of the hothouse, on the east. The grounds are laid out for an old-fashioned garden and archways will be trellised with seasonable flowers.

HORTICULTURE

Established by William J. Stewart in 1904

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NO. 20

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 78 Devonshire Street, Boston, Mass.

EDWARD I. FARRINGTON, Editor.
 Telephone Fort Hill 3694

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 Discount on Contracts for consecutive insertions, as follows:

One month (4 times), 5 per cent.; three months (13 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.

Page and half page space, not consecutive, rates on application.

SUBSCRIPTION RATES:

One Year, in advance, \$1.00; To Foreign Countries, \$2.00; To Canada, \$1.50.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1897.

Coal situation

As a rule the florists are in better shape as regards coal than they were when the war caused a shortage. Many of them made an extra effort during the summer to get in their supply and they can smile at strike conditions. Soft coal has been remarkably plentiful for several months past and could be bought at comparatively reasonable prices. Practically all of the larger growers stocked up well in advance of cold weather. Some of the smaller growers, however, have planned to buy as they went along. The strike, whether short or long, will cause them some trouble. On the whole, though, the trade will not be badly affected and it is not likely that production will be greatly curtailed.

As to shows

It was indeed a shock to go into Horticultural Hall in Boston last Sunday and find but half a dozen lonely looking chrysanthemums in place of the scores and hundreds which were wont to be shown there in the good old days. The chrysanthemum show was formerly considered one of the best of the year and a big attendance was always counted upon. The visitor could but murmur this year, "How have the mighty fallen."

It is true that the private greenhouses of New England do not contain the plants now that were to be found there before the war. It is also true that the scarcity of labor, an uneasy coal situation and heavy taxes caused many owners to curtail operations, and what is more to the point, perhaps, lose interest in the shows. While it might not have been possible to have such a show as in former years, yet a creditable exhibition might have been held if the inclination had been shown. It would be better to keep the hall closed, however, than to open it for such an exhibit as that just staged.

Apparently conditions on private places do not clear up as rapidly as we should like to have them. Some of the estates around Boston are running with a third less help than before the war. Only the other day we heard of an owner who was cutting down his already abbrevi-

ated force. Perhaps all this cannot be helped, but there seems to be a sort of apathy as regards horticultural matters. It would be a great pity if there should be a drifting away from the making of gardens and the laying out of estates or if a permanent indifference should develop to public exhibitions and the kind of friendly rivalry which has done so much for horticulture abroad. Somehow the lines of the poet thrust themselves into our memory:

Ill fares the land,
 To hastening ills a prey,
 Where wealth accumulates
 And men decay.

A new idea

If anything were needed to show the growing interest of the public in the flower business, it would be illustrated by the action of the Buffalo Courier in establishing a Flower Department. This is the first instance, we think, that such an innovation has been undertaken in this country. The idea is to make the department of real service, and of course this will help the trade by greatly stimulating the demand for flowers of all kinds. The announcement made by the Courier reads as follows:

"The Courier has instituted a department of flowers. The flower editor will inform you each week in regard to seasonable matters pertaining to flowers and plants for the home.

"The use of flowers for festive occasions such as Armistice day, Thanksgiving and Christmas, Valentine's day, Easter and Mothers' day, as well as for dinners, receptions, weddings and other social occasions, will all be treated at the proper time.

"This department aims to be of real service and any questions pertaining to flowers and their use on any occasion will be welcomed by the flower editor and answered in the order of their receipt."

Accompanying this notice is a long and well written letter by Mrs. Ella Grant Wilson dealing with chrysanthemums, their history and their improvement. Here is a plan to which the florists should give their hearty support. Perhaps a similar arrangement can be made with papers in other cities. At any rate the papers can be induced to publish articles from time to time which will be of no little value in popularizing flowers for all occasions.

A national flower

The choice of a national flower still remains to be argued about, and the claims of different flowers are frequently put forward with convincing assertions.

Seldom, however, is the matter gone into so deeply as by the women of Syracuse, N. Y. They present the following reasons why the columbine should be the nation's flower:

The columbine grows in every state in the union and its habitat is from Florida to the Rockies. Its blooms are red, white and blue on separate plants, of course, and its petals resemble horns of plenty filled with honey, which is emblematic of the United States. Inverted these petals resemble the claws of the American eagle, emblematic of being ready to protect its prosperity. The blossoms intact shows a five-pointed star and the leaves of the plant are thirteen lobed, indicative of the original thirteen states. It adapts itself to beautiful floral landscaping as well as to artistic design and painting. Unlike the golden rod, it is not a weed, but a hardy plant which year after year brings forth its beauty.

SHIPMENT OF NURSERY STOCK
IN BOND TO FOREIGN
COUNTRIES.

Washington, D. C., Oct. 27, 1919.
Dear Sir:

With respect to the movement of nursery stock in bond through American ports to foreign countries, the Federal Horticultural Board has issued the following provisional ruling:

(1) The classes of plants enumerated in Regulation 2, Quarantine No. 37 may pass through the United States in bond without permit or other compliance with the regulations. This is provided for in a paragraph of Regulation 4 of the quarantine, which reads:

Permits are not required for nursery stock and other plants and seeds, not under quarantine or regulation, entering the United States for immediate transportation in bond to foreign countries.

(2) The classes of plants included in Regulation 3 fall under "Rules and Regulations Governing the Entry for Immediate Exportation of Prohibited Plants and Plant Products" effective December 1, 1917, and may proceed to foreign countries in bond under the conditions indicated in Regulation 7 of the regulations referred to. The permit shall be in the form of a letter in quadruplicate which shall detail the safeguards to be enforced and, if necessary, the routing of the shipment, one copy of which shall be filed with the Board and one each sent to the importer, the customs officer, and the inspector of the Board at the port of arrival.

(3) Other plants or classes of plants and plant products for propagation not covered by Regulations 2 and 3 may be entered for immediate transportation and exportation in bond to foreign countries under the same terms as plants covered in Regulation 3, except as to plants which come with earth or soil about the roots or packed in earth or soil which has not been sterilized. As to such excepted plants their entry for transportation across the country in bond is prohibited, but provision may be made for their immediate export to the country of destination by any available ocean route.

In case of a mixed shipment which can not be conveniently separated or divided into the different classes the whole shipment must be governed by the class subject to the greatest restrictions as to entry.

Permits for classes 2 and 3 will be issued for each shipment; in other words, no open permits will be issued. These permits will either be issued from Washington or, when so author-



Price,
\$10.00

Plant Insurance at \$10

WHAT would happen if your night man fell asleep some night in zero weather? What if you should oversleep, or a cold wave hit your greenhouse when your heat is at the minimum? It would mean ruin to your plants—possibly ruin to you. There have been many such cases. But not if you are equipped with the STANDARD THERMOSTAT. The Standard Thermostat protects you from just such dangers. It will ring a bell at your bedside when danger is near. "I have one of your greenhouse thermostats I have used 3 years. It has proved so satisfactory I want another for my new houses."—John Sharper, Oxon Hill, Md., Jan. 6, 1919.

Get one today, \$10.00
(G. H. 4, same as G. H. 3, only under lock and key, \$15.00.)

STANDARD THERMOMETER CO.
LESTER STREET BOSTON, MASS.

CHRISTMAS PLANTS

Cyclamen, \$1.50 up; Begonias, 75c to \$2 each; Poinsettias, single, 50c, 75c and \$1 each; pans, made up with Ferns and Peppers, \$1.50 to \$4 each.

FERNS, Scottii, Verona, Boston and Roosevelt, 50c to \$2 each.

J. FRANK EDGAR, Waverley, Mass.

ANNOUNCEMENT

The New Crimson BERNICE Orders filled in strict rotation for December and January delivery
Carnation for 1920

STOCK LIMITED

WRITE FOR DESCRIPTIVE CIRCULAR

PRICE: \$ 14.00.....per 100
115.00.....per 1000

W. D. HOWARD, Milford, Mass.

ized, by the inspectors at the ports of entry provided for in Regulation 6 under Quarantine No. 37. Notification of arrival of such shipments provided for in Regulation 10 must be made by the importer or his agent to the inspector of the Board at the port of arrival who, after inspection and determination of the nature of the shipment, will make the proper endorsement on the customs manifest, which document must be held until inspection has been made.
C. L. MARLATT,
Chairman of Board.

'MUMS FOR PHILADELPHIA.
O. L. Henry & Sons, Pennsburg florists, are engaging in the cut flower

business on an extensive scale and are making regular shipments to the Philadelphia wholesale markets where they are deriving remarkable prices for their flowers. Last week the firm shipped 39 dozens of chrysanthemums to the Philadelphia markets. These same flowers are retailing in the Philadelphia retail stores for \$6.00 a dozen. On Monday another shipment of 15 dozens was made. Mr. Henry and his son are devoting a large part of the spacious greenhouses to the cut flower business and find it a profitable angle of their line. They have planned to ship at least 2,500 chrysanthemums to Philadelphia.—Pennsburg Pa., Town and County.

Penn
The Florist

"The Telegraph Florist"

Member of Florists' Telegraph Delivery

**124 TREMONT ST.
BOSTON**

H. F. A. LANGE

Worcester, Mass.

Delivers to all Points in New
England

150,000 Square Feet of Glass

Member Florists' Telegraph Delivery
Association

WORCESTER, MASS.

Randall's Flower Shop

HARRY I. RANDALL, Proprietor.
Member Florists' Telegraph Delivery

Providence, Rhode Island
Johnston Brothers
LEADING FLORISTS
38 Dorrance Street
Member Florists' Telegraph Delivery

Quality and Reliability

WARBURTON

FALL RIVER, MASS.

Deliveries of Flowers and Plants
in FALL RIVER and contiguous
territory.

The Beacon Florist
Beacon Street, **BOSTON**
Near Tremont

J. EISMAN, Manager, 14 years head
decorator and designer for Penn's.
Prompt, Efficient Service Guaranteed.

Zinn
The Florist
Park St., Boston

Flowers by Telegraph

Leading Retail Florists Listed by
Towns for Ready Reference. Orders
transferred by telegram or otherwise
to any of the firms whose address is
here given will be promptly and prop-
erly filled and delivered.

Beverly, Mass.—Beverly Flower Shop.
Boston—Penn the Florist, 124 Tremont St.
Boston—Zinn the Florist, Park St.
Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.
Buffalo, N. Y.—S. A. Anderson, 440 Main St.

Cambridge, Mass.—Harold A. Ryan.
Cleveland, O.—J. M. Gasser Co., Euclid Ave.
Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.
Cleveland, O.—Knoble Bros., 1834 W. 25th St.

Cleveland, O.—The Smith & Fetter Co.,
735 Euclid Ave.
Denver, Col.—Park Floral Co., 1643
Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New
Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017
Grand Ave.

Lawrence, Mass.—A. H. Wagland.
Malden, Mass.—J. Walsh & Son.
New York—David Clarke's Sons, 2139-
2141 Broadway.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
son Co.

Taunton, Mass.—Hall the Florist.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—H. F. A. Lange.

Worcester, Mass.—Randall's Flower Shop,
22 Pearl St.

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F. T. D.

A Card This Size

Costs only 90c. per Week
on Yearly Order

It would keep your name and your
specialty before the whole trade.
A half-inch card costs only 45c. per
week on yearly order.

HIGH GRADE PLANTS

For Retail Stores a Specialty

ASK FOR LIST

THOMAS ROLAND, Nahant, Mass.

LAWRENCE - - MASS.

A. H. WAGLAND

We Cover

LAWRENCE, METHUEN, ANDOVER,
NORTH ANDOVER, SALEM, N. H.
and Contiguous Territory
Member of F. T. D.

BEVERLY, MASS.

BEVERLY FLOWER SHOP Member
F. T. D.

MALDEN, MASS.

J. WALSH & SON Members
F. T. D.

HALL, The Florist

Telephone 1422

4 Main Street, **TAUNTON, MASS.**

National Florist for Taunton and vicinity



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WASHINGTON, D. C.

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FLOWERS The Best at
The Lowest



"I SERVE"

The Largest Popular Priced House in
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F. M. ROSS

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Other Stores

13 So. 60th St., 212 E. Girard Avenue

PHILADELPHIA

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Orders from all except members of
the F. T. D. must be accompanied by
remittance.

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Transfer Your Orders to

SAMUEL MURRAY

1017 Grand Avenue

Member Florists' Telegraph Delivery

DARDS FLOWER SERVICE
has spent GUARANTEED SATISFACTION
for nearly FIFTY YEARS.

Regular European sailings now established.
Let us fill your orders for Steamer Flower
Baskets, Corsages and Artistic Boxes of
Cut Flowers.

DARDS, Inc., Florist,
341 Madison Ave., New York

S. A. ANDERSON

440 Main St., Buffalo, N. Y.

ANDERSON service means fresh, sturdy
Stock and prompt deliveries in BUFFALO,
LOCKPORT, NIAGARA FALLS and
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FLORISTS

Telephones 1501 and L 1536

1415 Farnum St.

OMAHA, NEB.

THE KNOBLE BROTHERS CO.

Flowers and Nursery Products

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We are well equipped to handle
your orders.

1836 W. 25th Street CLEVELAND, O.

THE SMITH & FETTERS CO.

735 Euclid Avenue

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Flowers of Every Kind in Season

PHILADELPHIA

CHAS. H. GRAKELOW F.T.D.

Everything in Flowers

Broad Street at Cumberland

The Park Floral Co.

B. E. GILLIS, President.

E. P. NEIMAN, Secretary.

Member Florists' Telegraph Delivery

DENVER, COLORADO

IN THE

National Capitol

At your service to deliver Flowers
or Designs on Order by Tele-
graph or otherwise. Prompt
Reliable Service.

GEORGE H. COOKE

Connecticut Ave. and L St.
WASHINGTON, D. C.

**JOHN BREITMEYER'S
SONS**

Cor. Broadway and Gratiot Aves.
DETROIT, MICH.

**Artistic Designs - . . .
High Grade Cut Blooms**

We cover all Michigan points and good
sections of Ohio, Indiana and Canada.
Members Florists' Telegraph Delivery
Association.

BOSTON'S FLOWER WEEK

Much Interest Aroused by Advertise-
ments and a Parade

Armistice Day in Boston was made
notable by the members of the Flor-
ists' Association, who held a parade
and distributed flowers to the hospi-
tals of the city. It was a lively scene
which met the eye early in the morn-
ing, for everybody in the market was
busy getting the flowers into boxes.
The amount of excellent stock contrib-
uted was almost amazing, considering
the high prices which all flowers were
bringing. The newspapers played up
the parade in good shape, and the fol-
lowing was the Globe's report:

"Members of the Florists' Associa-
tion of Boston dispatched 35 automo-
bile delivery wagons with approxi-
mately 25,000 blooms and 1000 potted
plants to the patients in the various
hospitals in Boston.

"To the sick, the maimed and the
convalescent, Armistice Day, as it did
to the rest of America, meant peace
and rejoicing that the war was over.
But it remained for the florists to
think of the unfortunate hospital pa-
tients, and yesterday they inaugurated
a practice that it is hoped will grow
with each succeeding year until Armi-
stice Day and floral gifts will be syn-
onymous.

"Early in the morning the members
of the Florists' Association of Boston

**MaSchling
Flowers**

Schling Service
Nothing Better

785 Fifth Avenue, New York City

"Says It With Flowers"

CLEVELAND

A. GRAHAM & SON

5523 Euclid Ave.

Will take good care of your orders
Members of F. T. D. Association.

DAVID CLARKE'S SONS

Deliver orders from any part of the country to

New York City

Write or Telegraph

2139-2141 Broadway, - New York
Telephone 1552-1553 Columbus

KOTTMILLER, Florist

426 Madison Ave. and 49th St., New
York. Also Vanderbilt Hotel

Telephone, Murray Hill 783

Out-of-town Orders Solicited. Location
Central. Personal Attention.

Member F. T. D. Asso.

G. E. M. STUMPP

761 Fifth Ave.

NEW YORK CITY

Member Florists' Telegraph Delivery Asso.

WILSON BROOKLYN

Main Store
8 and 5 Greene Ave. NEW YORK

Member Florists' Telegraph Delivery Asso.

Phones, Prospect 6800-6801-6802

DELIVERIES IN NEW YORK, BROOK-
LYN and LONG ISLAND

THE J. M. GASSER COMPANY,

CLEVELAND

Euclid Avenue

The Far-Famed Flowers of
TORONTO

Delivered on mail or telegraph order for
any season, in any part of the Dominion.

JOHN H. DUNLOP

2-10 West Adelaide St. - TORONTO, ONT

When writing to advertisers kindly
mention HORTICULTURE

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

Trade Prices on Application

R. & J. FARQUHAR & CO.
BOSTON, MASS.

JUST OUT

**BOLGIANO'S 1919 SUMMER AND FALL
CATALOG OF "BIG CROP" SEEDS**

Special Prices for
Florists and Market Gardeners.
Write for a copy at once—it will save you
money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.

STUMPP & WALTER CO.

Seeds and Bulbs

30-32 Barclay Street
NEW YORK CITY

SEEDS, BULBS, PLANTS JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

SEEDS AND BULBS Boddington's

128 Chambers St., N. Y. City

BOBBINK & ATKINS NURSERYMEN, FLORISTS, PLANTERS

RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's
Fund for Market Development, also "Say
It With Flowers" Publicity Campaign.

GARDEN SEED

BET, CARROT, PARSNIP, RADISH and
GARDEN PEA SEED in variety; also other
items of the short crop of this past season
as well as a full line of Garden Seeds, will
be quoted you upon application to

S. D. WOODRUFF & SONS
82 Day St., NEW YORK and ORANGE CONN.

BURNETT BROS. Seeds, Bulbs, Plants Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

and their employees gathered at the
Boston Flower Exchange, Otis street,
and prepared immense boxes of
flowers for distribution among the pa-
tients. Growers, commission men and
retail florists contributed great quanti-
ties of chrysanthemums, roses, carna-
tions, sweet peas and other seasonable
blooms and plants in order that the
day might be made brighter and more
cheery for every hospital patient in
the city.

"The great flower boxes were
packed with approximately 150 blooms
each, and into each of the 35 cars six
of these boxes and several potted
plants were packed. Each package
contained a card denoting that the
contents were presented by members
of the association, and at 10.15 the
parade of cars, in single formation,
across the windshield of each being
pasted the National slogan, 'Say it
with flowers'—and the information
that the machines were assigned to
the various hospitals by the Florists'
Association of Boston, started on their
missions of mercy with the blowing of
auto horns and the ringing of bells.

"Upon the steps of the Boston
Flower Exchange, their faces wreathed
in smiles of satisfaction, the members
of the organization and the officers,
Pres. Henry Penn, Vice-Pres. William
H. Elliott, Sec. E. S. Gorney, Fin. Sec.
Frank Edgar and Treas. William C.
Stickel, watched the cavalcade move
away.

"The machines moved through the
downtown streets, along Boylston
street to Copley square, where the
unique parade disbanded and the ma-
chines departed for their various des-
tinations.

"Yesterday's innovation, it is hoped,
will be more generally observed next
year. Chrysanthemums of every color
and specie predominated among yes-
terday's contributions, and plans are
already afoot to have New England's
November flower, symbolic of Thanks-
giving, take its place as the Armistice
Day favorite of the future."

MICHELL'S FLOWER SEEDS

ORDER NOW

For delivery when new crop seed
arrives

VERBENAS	Tr.	Pkt.	Oz.
Mammoth Fancy Blue	30	30	\$1.25
Mammoth Fancy Pink	30	30	1.25
Mammoth Fancy Scarlet	30	30	1.25
Mammoth Fancy Striped	30	30	1.25
Mammoth Fancy White	30	30	1.25
Mammoth Fancy Mixed	30	30	1.00
LOBELIA			
Crystal Palace Compacta	30	30	2.00
Crystal Palace Speciosa	30	30	.75
VINCA			
Alba	15	15	.75
Alba Pura	15	15	.75
Rosea	15	15	.75
Mixed	15	15	.60
SALVIA			
America or Globe of Fire	50	50	4.00
Bonfire	50	50	2.50
Zurich	50	50	4.00
Splendens	25	25	1.50

ASPARAGUS PLUMOSUS NANUS
Northern Greenhouse-grown Seed
1000 seeds...\$ 3.50 10,000 seeds...\$30.00
5000 seeds... 16.25 25,000 seeds... 68.75
ASPARAGUS SPRENGERI
1000 seeds...\$0.75 10,000 seeds...\$ 5.50
5000 seeds... 3.00 25,000 seeds... 12.50
Also all other Seasonable Seeds, Bulbs
and Supplies. Our Handy Flower Seed
Order Sheet Will Be Ready Soon. Send
for a Copy.

MICHELL'S SEED HOUSE
518 Market St., Philadelphia

W. E. MARSHALL & CO.
SEEDS, PLANTS AND BULBS
Horticultural Sundries
66 W. 23rd St., NEW YORK

THE National Nurseryman

The oldest and best established
journal for nurserymen. Circula-
tion among the trade only. Pub-
lished monthly. Subscription price
\$1.50 per year. Foreign subscrip-
tions, \$2.00 per year. In advance.
Sample copy free upon application
from those in the trade enclosing
their business card.

National Nurseryman Pub. Co., Inc.
HATBORO, PA.

BILLBOARD ADVERTISING

Mayor O'Keefe Makes an Answer to
J. Horace McFarland.

November 5, 1919.

Dear Sir:—In your issue of October 11, appears a letter from J. Horace McFarland, President of the American Civic Association, which was evidently written under the stimulus of deep feeling. The writer of the letter had evidently worked himself into a small sized frenzy in attempting to not only show where he stands in regard to the product of the Society of American Florists to popularize the slogan "Say It With Flowers" with the incidental use of billboards, but he also wants to have all billboard advertising on the face of the earth swept away.

Like very many other propagandists, discretion in the use of words is not a part of Mr. McFarland, nor does logic or fact concern him. He states that "the project is an evidence, and a sad evidence at that, of the lack of business acumen within the controlling councils of the Society of American Florists at a time when the shrewdest and ablest advertisers are quitting the billboards."

We wonder how far Mr. McFarland has investigated what the "shrewdest and ablest advertisers" are planning for 1920 campaigns as to how far they are quitting billboards. If he had investigated, he could not have made this statement with that regard for the truth which should be the keynote of anybody guiding advertising or writing letters. If he has not investigated—and he should not have made this statement without so doing—it might interest Mr. McFarland to know that one of the "shrewdest and ablest advertisers" of the country intends to spend in 1920, something like four million dollars in billboards alone, and if he has an idea that this is going to be a blot upon the landscape, we might tell him for his further information that Boards of Trade, and people owning property, and automobilists in general, have not only been grateful for the use of these billboards upon the highways, but have made requests for them to be put up.

We do not believe that the advertising of the United States Rubber Company, in their very interesting little histories of historic spots, offends the eyes of the most fastidious nature lovers. The objections which Mr. McFarland finds to billboards are the same as those that can be found in any form of advertising. Any advertising that is not in good taste, that is not pleasing to the eye, that is not truthful, or that displays objection-

able words or pictures, should not only be barred from the billboards on the public highways, but also from the pages of the magazines.

Outdoor display advertising has undergone the same evolution towards better advertising as the advertising in the magazines and newspapers of the better sort.

Some of the greatest advertising successes come from the proper use of outdoor displays. Gold Medal Flour—"Eventually. Why not 'now'?"—is not, we think, an example of the lack of business acumen, nor have women's clubs, having seen this advertising on billboards, refused to bake with flour put out by the manufacturer who paid for the boards. The nucleus of the Washburn-Crosby advertising was billboards.

Coca-Cola did not use any magazine or newspaper advertising until several years of the use of billboards had built them a tremendous distribution of their product.

The Hood Rubber Company, after one year in which magazines were used exclusively, proved by actual test from coast to coast that they could improve their business by almost 80 per cent by linking up their advertising with billboards.

The Sonora Phonograph which was constructed to sell as the highest grade phonograph on the market, representing the very top-notch of quality, established itself by the use in New York of a billboard that was a beautiful conception from the standpoint of art in advertising.

The kind of billboards to which Mr. McFarland refers evidently is simply the kind of advertising that should

not be allowed anywhere. Those hideous and blatant splotches which simply attract attention as the barker at a circus attracts attention to the Fat Girl and the Ossified Man are things of the past and must not be confused with the kind of billboard advertising done by reputable advertising men.

Mr. McFarland cannot possibly think that the Publicity and Finance Committee of the Society of American Florists showed any lack of business acumen in the national advertising

ALL IMPORTED BULBS

DUTCH—FRENCH—JAPANESE AT TRADE PRICES

Keep your Counter Display Alive

Nothing Better than Bulbs and None Better than Ours

Moderate cost. Big Profits. No Loss

Tulips, Hyacinths, Narcissus

Finest in Cultivation

Write for "Book for Florists"

43 Barclay St.
New York City

Vaughan's Seed Store

33 W. Randolph St.
Chicago, Ill.

THIS SEASON'S NEW ROSES

PILGRIM CRUSADER PREMIER RUSSELL HADLEY

We are receiving daily shipments of these new Roses, in large quantities, and can furnish same on short notice.

We have a large stock at all times of choice CARNATIONS, CHRYSANTHEMUMS, ORCHIDS, VALLEY and AMERICAN BEAUTIES.

Tel., Main 6267
5948

WELCH BROS. CO. 262 DEVONSHIRE STREET
BOSTON, MASS.

MASTER BRAND CONCENTRATED MANURE!

Greenhouse and Garden Fertilizers. Write us for detailed information and prices on

High Grade Concentrated
Sheep Manure

and our

Vine and Plant Manures

PROTO FEED & GUANO CO.

4121 S. La Salle St.

CHICAGO

FOR IMMEDIATE DELIVERY

Lilium Giganteum

Pulverized Sheep Manure
Fertilizers for the Greenhouse

JOSEPH BRECK & SONS

(CORP.)

SEEDS BULBS PLANTS

51 North Market Street

Boston, Mass.

which has been so successful in securing increased business for florists all over the United States. He can rest assured that if they now decide to add another force through billboards to their already perfected plans for the use of national magazines, they are doing so because of that business acumen which guided them in the past.

One of Boston's most successful florists,—a florist who sells, we know, to many ladies who belong to women's clubs—uses billboards, and even Mr. McFarland himself, we do not think, could call them anything but beautiful.

No billboards, of course, should be put up to spoil one's view of a beautiful landscape, and the billboards proposed by the Publicity and Finance Committee of the Society of American Florists will be in keeping with all of the other advertising which the Society has done. They will go mostly on the tops of buildings and along the railroads, and we feel certain will serve as a pleasing link between the issues of the magazines to remind people that there is something more in life than the selfish pursuit of the gains of commerce for one's own use, and that sentiment after all is what makes life worth living. It was this thought, evidently, which actuated the

committee back of the Red Cross drive, for they used outdoor displays so prominently in Boston that nobody could forget that he had a duty to perform in enrolling himself as a member of the Red Cross.

Yours very truly,
P. F. O'KEEFE.

THE MARKET

Strong market conditions have been very reassuring the past few days. Of course chrysanthemums are in great abundance, but they are also in great demand. The little button "mum" Baby is in especially good supply and remarkably well done. The first Chadwicks showed up this week, but as usual Bonaffon remains the flower on the market. Almost everybody grows it and everybody wants it. Carnations are increasing both in quantity and quality. In the Boston market Morning Glow, put out by Edward Winkel of Wakefield, is making a very fine impression, and is particularly popular with out of town buyers because of its excellent shipping qualities. Snapdragons are beginning to come well, but so far are nearly all pink. There is hardly a normal supply of roses, probably due to the weather. Usually the market is load-

ed with roses at the time 'mums are plentiful, but that is not the case this year. Sweet peas of good quality are beginning to show up, and so are Boston yellow Marguerites. The Boston market shows a lot of Calendula with extraordinarily long stems, but the sale is only fair. There is a suspicion that the market is going stale on this flower.

ANNOUNCEMENT

RETAIL

THOS. F. GALVIN, JR.
FLORIST

256 Devonshire Street

I have opened an office and workroom at the above address which is in the heart of the wholesale flower market. In this location I am at all times able to get the pick of the market and to sell at low prices. I offer many years of experience and personal supervision on each order.

One of the most artistic decorators in the business is associated with me and we make a specialty of designs and decorations for any occasion. I can save you money on plants of any description.

I thank you for your many past favors and hope I will have the opportunity of sharing your patronage. A telephone call will bring me or one of my representatives to offer suggestions.

THOS. F. GALVIN, JR.

BOSTON FLORAL SUPPLY COMPANY

Wholesale Florists

DEALERS IN

Cut Flowers and Evergreens

We manufacture our Baskets, Wax flowers, Wax designs, Wire frames, etc., and preserve our Cypas Leaves right in our own factory.

Office, Salesrooms, Shipping Dept.

15 Otis St. 96 Arch St.
BOSTON, MASS.

Telephones, Main 2574, 3525

For All Flowers in Season Call on

THE LEO NIESSEN CO.

1201 Race St. Philadelphia, Pa.

EDWARD REID

WHOLESALE FLORIST

1619-21 Ranstead St., Philadelphia, Pa.

CHOICE BEAUTIES, ORCHIDS, VALLEY, ROSES
and all Seasonable Varieties of Cut Flowers

Wired Toothpicks

Manufactured by

W. J. COWEE, Berlin N. Y.

10,000...\$2.25 50,000...\$9.75 Sample free.
For Sale by Dealers

GEORGE B. HART

WHOLESALE FLORIST

24 Stone St., Rochester, N. Y.

CUT FLOWER BOXES

EDWARDS FOLDING BOX CO
MANUFACTURERS
PHILADELPHIA, PA.

SMITH BURNSIANA OPEN TO THE PUBLIC

William F. Gude has sent us a clipping from the Washington Evening Star in regard to the Smith Burnsiana which is now open to the public. As Mr. Gude says in his letter, the publication of this paragraph will be an inspiration to the younger element in the trade, although they may not have had the pleasure of knowing William R. Smith, the father of the S. A. F. & O. H. charter personally. The clipping reads as follows:

"Announcement is made through John H. Cowles, secretary general, Supreme Council of the Ancient and Accepted Scottish Rite, that the William R. Smith Burnsiana is now accessible to the general public, between the hours of 9 a. m. and 5 p. m., Sundays and holidays excepted, in the Burnsiana room, at the House of the Temple, 16th and 8 streets northwest.

The Burnsiana room is located on the south side of the ground floor of the temple, immediately below the offices of the secretary general. Application must be made to the librarian on the main floor for access to the books in the locked cases.

Gustave Beekman has become gardener to Mrs. L. A. Hermann, Long Beach, N. Y.

Robert Crighton, who has returned from service in the army, has become head gardener on the Charles Bradley estate, Convent, N. J.

HENTZ & NASH, Inc.

Wholesale Commission Florists

55 and 57 West 26th Street

Telephone No. 755 FARRAGUT NEW YORK



The Meyer Florists' Green Thread is different from any other make. Every spool contains 2 ounces of actual thread, 16 ounces to a pound. See that you get the Meyer Florists' Green Thread and you will get the very best thread in the world. Don't take any substitutes.

Manufactured by

John C. Meyer Thread Co.

BOSTON, MASS. Mills at Lowell, Mass.

H. E. FROMENT

Wholesale Commission Florist
Choice Cut Flowers

New Address, 148 West 28th St., NEW YORK
Telephones: 2300, 2201, Madison Square.

WM. P. FORD

Wholesale Florist

107 W. 28th Street, NEW YORK

Telephone 5335, Farragut
Call and inspect the Best Establishment
in the Wholesale Flower District.

WALTER F. SHERIDAN

Wholesale Commission Dealer in

CHOICE CUT FLOWERS

133 West 28th Street, New York

Telephone 4833-4835 Madison Square

E. G. HILL CO.

Wholesale Florists

RICHMOND, IND.

Please mention Horticulture when writing.

REED & KELLER

122 West 25th St., New York

Florists' Supplies

We manufacture all our
Metal Designs, Baskets, Wire Work & Novelties
and are dealers in
Decorative Glassware, Growers and
Florists' Requisites

THE KERVAN CO

Fresh Cut Decorative Evergreens.

Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
Catalog of Greens and Florists' Supplies
119 W. 28th St., - NEW YORK

WILLIAM H. KUEBLER

Brooklyn's Foremost and Best

WHOLESALE COMMISSION HOUSE

* First Class Market for all CUT FLOWERS

Willoughby St. Brooklyn, N. Y.

WE WANT MORE SHIPPERS

We have a numerous clientele of New York City buyers and the demand exceeds our supply. This is especially true of Roses. We have every facility and abundant means and best returns are assured for stock consigned to us.

Address Your Shipments to

UNITED CUT FLOWER CO., INC.

111 W. 28th St., New York

D. J. Pappas, Pres.

FRANK J. REYNOLDS CO.

Wholesale Florists

Boston Co-operative Flower Market

260 DEVONSHIRE STREET

BOSTON, MASS.

BOSTON'S SMALL SHOW.

The Fall show of the Massachusetts Horticultural Society, Saturday and Sunday, was the smallest that has been held for years.

The list of prizes and gratuities awarded follows:

Awards for Fruits.

Josiah Bradley Fund. Apples. Six varieties, twelve specimens each: 1st, Hillcrest Farm; 2d, G. V. Fletcher. Three varieties, twelve specimens each: 1st, Hillcrest Farm. One variety, twelve specimens: 1st, Hillcrest Farm; 2d, J. R. Ness.

Theodore Lyman Fund. No 1. Collection of fruit arranged for decorative effect: 1st, Mrs. R. Goodnough. Quinces. Twelve specimens: 1st, E. A. Clark.

Marshall P. Wilder Fund. Pears. Collection of six varieties, twelve specimens of each: 1st, G. V. Fletcher; 2d, F. W. Dahl. Collection of three varieties, twelve of each: 1st, John Bauernfeind; 2d, E. B. Wilder. One variety, twelve specimens: 1st, John Bauernfeind; 2d, G. V. Fletcher.

Society's Prizes. Collection of native and foreign fruit arranged for effect, to cover not over 30 sq. ft.: 1st, Hillcrest Farm. Silver Medal.

Gratuity: J. R. Ness, 48 Baldwin apples.

Awards for Vegetables.

John A. Lowell Fund. Collection of Vegetables.—Six varieties: 1st, E. A. Clark.

Awards for Plants and Flowers.

Gratuity:—E. A. Clark, Large-bloom single-stem Chrysanthemums.

Silver Medal: Edwin S. Webster, Cymbidium Doris; William C. Rust, Begonia Pink Perfection; E. B. Dane, Cypripedium Dreadnaught (C. Leeanum Clinkaberry-anum XC. Insigne Harefield Hall).

NASSAU COUNTY HORTICULTURAL SOCIETY.

A large crowd greeted the opening of the 15th Annual 'Mum Show of the above Society on Oct. 30-31, at Pembroke Hall, Glen Cove. Competition was unusually keen in all the 53 classes, the number of entries being the largest on record. The chrysanthemum and vegetable exhibits were exceptionally fine as were the roses, carnations, violets and decorative work. The special class for canned fruit and vegetables, put up by the wives of the active members proved quite a feature. Mrs. F. L. Hine, Mrs. F. B. Pratt and Mrs. Paul Dana, who are honorary members, were the judges for this class as well as the table decorations. Particularly deserving of notice was a large anemone bush chrysanthemum named Emma, shown by Robt. Marshall, not for competition. The judges awarded it an award of merit and the N. A. G. gold medal for the most meritorious exhibit in the show. An award of merit was also given a new rose shown by Chas. H. Totty named "Frank W. Dunlop," which attracted much attention. The table decorations was the feature on the second day of the show. Geo. Ferguson was awarded the silver cup, Wm. Milstead 2nd, and Harry Goodband 3rd. J. Henry F. Matz, Glen Cove was given special mention for a display of flower baskets.

The principle prize winners were: Peter Smith, Wm. Noonan, Jas. Mc-

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

B. A. SNYDER CO. *Wholesale Florists..*

Hardy Cut Evergreens, Cut Flowers and Florists Supplies

21-25 Otis Street, BOSTON, MASS.

Telephone Fort Hill 1083-1084-1085

WILLIAM F. KASTING Co. Wholesale Florists

568-570 WASHINGTON STREET - BUFFALO, N. Y.

New England Florist Supply Co.

276 Devonshire Street,

BOSTON, MASS.

Telephones, Fort Hill, 3469 and 3135

MICHIGAN CUT FLOWER EXCHANGE, Inc.

WHOLESALE COMMISSION FLORISTS

Consignments Solicited

Hardy Fancy Fern Our Specialty

264 RANDOLPH ST., DETROIT, MICH.

The House for Quality and Service

ZECH & MANN

We are Wholesale Florists Doing a Strictly Wholesale Business

30 East Randolph Street, CHICAGO

Carthy, Thos. Proctor, Geo. Ferguson, Ben Sutherland, F. Sargent, Thos Twigg, Wm. Churchill, J. W. Everitt, F. O. Johnson, Thos. Henderson, Frank Petroccia, Alex. McKinzie, Ed. Harris and Chas. Young. The judges were Howard Nichols, John McQueen, Ernest Robinson, Peter Duff, Wm. McCarter and John F. Johnston, Harry Goodband ably assisted by Ernest Westlake and Jas Gladstone were the managers.

HARRY GOODBAND, Cor. Secy

CHICAGO.

There is a good demand for commercial fertilizers. As the cost of production has become larger and larger, the growers have been impressed with the necessity of getting larger and better crops and the force of the slogan, "Feed your soil that it may feed you," has become to mean more to them than ever before.

The larger number of letters coming into the Chicago offices of the Pulverized Manure Co., the Chicago Feed and Fertilizer Co. and the Proto Feed and Guano Co., inquiring for commercial fertilizers indicate that growers are learning their value.

NEW ENGLAND.

William H. Forbes, Veteran of the Canadian forces in the World War, who saw service from the first days of the conflict, and his brother Michael Forbes, have taken over the Aylward greenhouses on Willow street, Woburn and the O'Rourke greenhouses on Bedford road of the same city, and will operate them for the production of flowers and vegetables. The young men have had experience in this line and know the business. They are now picking violets in the Willow street houses and radishes are being grown

THE BOILER OF Unequalled Fuel Economy

Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1916.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

in the Bedford road houses. They will grow for the wholesale trade, marketing their product in Boston.

Frank J. McGregor of the firm of C. J. McGregor & Son, florists, Newburyport, has been confined to his bed as a result of injuries received in an automobile accident. Mr. McGregor had a blowout when his machine was on High street at the head of Olive street, and stopped to fix the tire. He drove his car as near the curbing as possible before he stopped. As he was stooping over an automobile driven by Austin Morse of Fitchburg came along and struck him, knocking him down and one wheel, it is thought going over him.

According to newspaper reports Conrad Schultz of Westerly, R. I., who has been conducting a florist business with greenhouses in Franklin street, has made an assignment to John A. Dunn for the benefit of his creditors. The assets of the assignors are given as \$2,325.12 and the liabilities \$4,058.27.

Mr. Schultz had a retail store in the Welch building in Broad street.

PHILADELPHIA

Kenneth Earl, son of Howard M. Earl, in a competitive examination for appointment to the U. S. Naval Academy at Annapolis received the highest rating and has received therefor the coveted appointment from Congressman Henry W. Watson of Bucks County—the 8th Pennsylvania district. We extend our congratulations and best wishes to the young gentleman, who we feel sure is destined to shine in his chosen career on the ocean blue.

Recent visitors to Philadelphia include Geo. W. Hess, U. S. Botanic Gardens, Washington, D. C.; H. E. Bloom, supt. for F. E. Dixon, Elkins Park, Pa.; Calvin N. Keeney, LeRoy, N. Y.; G. H. Dicks and F. B. Dawson, representing Cooper, Taber & Co., London, England; Elmer B. Weaver, Ronks, Pa.

Henry F. Michell is back at his desk after a week's vacation at White Sulphur Springs, Virginia, where he was

accompanied by Mrs. Michell and party.

BOSTON.

At the next meeting of the Gardeners' and Florists' Club, Nov. 18, Mr. Douglas Eccleston, orchid grower for A. C. Burrage of Beverly, will give an illustrated talk on orchids.

The annual meeting of the Massachusetts Horticultural Society for the election of officers will be held at noon, Saturday, Nov. 15.

A. G. Hood of Manchester, N. H., came into the market last week and bought 10,000 carnations, the result being a sudden stiffening of prices all along the line.

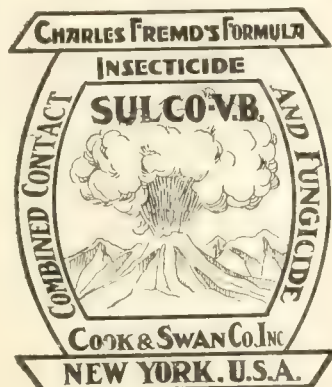
Frank J. Reynolds was taken ill in the market last Saturday and was taken to the Relief Hospital, afterward being removed to his home, where he is rapidly recovering.

The trade in Boston has been much interested to learn that Thos. F. Galvin, Jr., has gone into business for himself. He has opened an office and workroom and has very competent assistance.

WHOLESALE FLOWER MARKETS—Trade Prices Per 100—To Dealers Only

	BOSTON Nov. 10	NEW YORK Nov. 10	PHILA. Nov. 10	CINC'I. Nov. 10	CHICAGO Nov. 10	PITTSBURG Nov. 10	BUFFALO Nov. 10
Roses							
Am. Beauty	4.00 to 30.00	3.00 to 50.00	20.00 to 60.00	10.00 to 50.00	12.00 to 50.00	8.00 to 40.00	5.00 to 50.00
Hadley	3.00 to 15.00	3.00 to 25.00	8.00 to 15.00	8.00 to 20.00	4.00 to 15.00	..... to .....	..... to
Hoosier Beauty	3.00 to 15.00	3.00 to 6.00	4.00 to 12.00	5.00 to 15.00	4.00 to 15.00	..... to .....	..... to
Killarney	2.00 to 12.00	2.00 to 6.00	4.00 to 8.00	5.00 to 12.00	4.00 to 12.00	4.00 to 15.00	..... to
White Killarney	2.00 to 12.00	2.00 to 6.00	4.00 to 8.00	5.00 to 12.00	4.00 to 12.00	4.00 to 15.00	..... to
Mrs. Aaron Ward	2.00 to 15.00	3.00 to 20.00	10.00 to 25.00	6.00 to 20.00	6.00 to 25.00	6.00 to 20.00	..... to
Mrs. Chas. Russell	4.00 to 2.00	2.00 to 6.00	..... to	6.00 to 20.00	4.00 to 12.00	6.00 to 15.00	..... to
Mr. Geo. Shawyer	3.00 to 10.00	2.00 to 6.00	10.00 to 25.00	6.00 to 25.00	4.00 to 25.00	6.00 to 20.00	..... to
Columbia	3.00 to 15.00	2.00 to 20.00	4.00 to 8.00	6.00 to 12.00	4.00 to 12.00	4.00 to 12.00	..... to
Maryland	2.00 to 10.00	2.00 to 6.00	4.00 to 12.00	5.00 to 15.00	4.00 to 15.00	4.00 to 15.00	..... to
Ophelia	3.00 to 10.00	2.00 to 10.00	1.00 to 1.50	1.00 to 1.50	..... to	1.00 to 2.00	..... to
Adiantum	.75 to 1.00	.75 to 1.00	..... to	25.00 to 50.00	50.00 to 75.00	40.00 to 50.00	..... to
Asparagus plum	.25 to .50	.15 to .25	..... to	25.00 to 35.00	.50 to 1.50	50.00 to 75.00	..... to
Asparagus plum	.25 to .50	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Pom Pons	.25 to 1.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Bonaffon	1.50 to 5.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Calendulas	2.00 to 4.00	5.00 to 15.00	5.00 to 15.00	2.00 to 4.00	2.00 to 5.00	4.00 to 6.00	..... to
Carnations	2.00 to 5.00	1.00 to 3.00	3.00 to 4.00	3.00 to 4.00	3.00 to 6.00	2.00 to 4.00	..... to
Chrysanthemums	.50 to 5.00	4.00 to 35.00	10.00 to 30.00	10.00 to 35.00	15.00 to 35.00	8.00 to 50.00	8.00 to 40.00
Calla	3.00 to 4.00	..... to .....	..... to .....	..... to 20.00	.25 to .30	..... to .....	..... to
Ferns, Hardy	1.50 to 2.00	..... to	20.00 to 40.00	..... to 15.00	.15 to .20	..... to .....	..... to
Galax leaves	..... to 2.00	15.00 to 25.00	15.00 to 20.00	..... to .....	..... to .....	..... to .....	..... to
Marguerite	.75 to 3.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Narcissus	2.00 to 4.00	.50 to 1.50	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Orchids Cattleyas	75.00 to 125.00 to	100.00 to 150.00 to to	75.00 to 100.00 to
Orchids Cypripediums to .75 to to	15.00 to 20.00	20.00 to 25.00 to to
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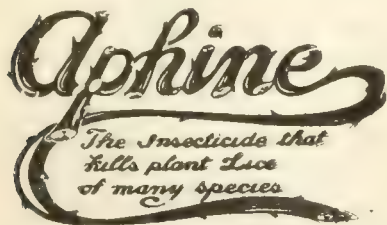
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Rambling Observations of a Roving Gardener

Seldom, it seems to me, have the bushes of the black alder (*Ilex verticillata*) been so loaded with fruit as this season. At intervals when driving through the woods one sees brilliant blotches of color which reveal the presence of this fine native shrub. The profusion of fruit is being reflected in the florist shops, where the black alder is being offered in generous amounts this season. There is no reason why this shrub should not be planted more freely in gardens, for its decorative value in the Fall is great. Although it rather prefers a moist soil, it will grow in other situations. It is hardly to be planted as a specimen, for its habit of growth is too open for that, but it is excellent mixed with other shrubs.

The Inkberry (*Ilex glabra*), is another native shrub which merits more attention than it receives. Although its black berries are not so striking as the red fruit of the black alder, it is a pretty plant and very well adapted for hedges. The Japanese plant *Ilex crenata*, which at one time was expected to become very useful and popular for hedges, has not proved hardy enough in the North to be satisfactory. The Inkberry may very well be used in its place.

Speaking of hedge plants, I am reminded as I read the last number of the *Minnesota Horticulturist*, that the number of shrubs which make good hedges is much larger than is realized by people in general. In the *Minnesota* paper, which is the organ of the Minnesota Horticultural Society, a list is given which includes buckthorn, alpine currant, cotoneaster acutifolia, red-twigg dogwood, willow and thornapple. All these are given as plants which should be clipped. For those which need no clipping, *Spiraea Van Houttei*, Thunberg's barberry, Tartarian honeysuckle, lilacs and mock orange are recommended.

Cotoneaster acutifolia is one of the newer Chinese plants which promises much for the North West. It seems fully able to cope with the extremes of climate and has a very pretty habit of growth. The fruit is black. After a thorough trial Holm & Olson are recommending it without reservation and apparently are getting well introduced. No doubt there are other sections in which it would be very useful.



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HORTICULTURE

Vol. XXX

NOVEMBER 22, 1919

No. 21

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Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

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Elegantissima, elegantissima compacta, and Muscosa, 3½-inch		\$0.35
Elegantissima and elegantissima compacta, 6-inch		.75
Muscosa, 6-inch		.75
Elegantissima and elegantissima compacta, 8-inch		2.00
Elegantissima and elegantissima compacta, 10-inch		4.00
Harrisii, 8-inch		3.00
Dwarf, Boston, 8-inch		2.00

If plants are shipped in pots, 10% additional.

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The first complete order for a billboard sign, that is, an order accompanied by a cheque covering the price, \$50, was received from the Springfield Floral Co., Springfield, N. J., and the sign is to be installed on the company's property along a much traveled highway. Florists ordering billboard signs are requested to observe the requirement of our Committee that cash accompany the order. The reason for this is obvious. Under the terms of our contract with the manufacturers of the billboards, we are obliged to make prompt payment of all invoices in order to get the specially low price on our quantity liability, and if our requirement were not made, we should have to face a temporary necessity of meeting our liability from our Fund, which would not be right, for it would have a tendency to impede our publicity work. A billboard purchased individually would cost \$95, at factory, while we supply them under our contract for \$50, delivered at any railroad station in the United States. We have orders pledged covering one hundred of the billboards, some of the pledges covering four billboards each. Our Committee is very anxious to get five hundred of these splendid publicity agents working, and all who have sites and feel that they can help us to the extent of purchasing a sign, are urged to get into communication.

Our Committee is most anxious to hear from that big army of non-subscribers to whom it has been appealing for some time. What a tremendous success their support would mean for the complete establishment of our slogan, "Say it With Flowers," the best slogan ever promulgated. Already our Promotion Bureau is in receipt of requests from publicity engineers in other lines of trade for the privilege of using it to carry along counter slogans of their own. One such personage quite recently applied for the privilege of using it in connection with publicity for candy. He proposed to use it in the following way:

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interests of other industries. Expert publicity men concede that its value to us is not less than a million dollars as an investment. Our friends are asked to keep on the lookout for any misuse of it. And while we are on the subject, let us suggest that florists who are using it be sure to use it in the script form adopted for all our publicity. While printers as a rule cannot duplicate the form from ordinary type, our Promotion Bureau provides at small cost, electrotype lines in a variety of sizes, and adaptable for any purpose. They make a wonderful difference in the appearance of the slogan.

Now won't you, Mr. Non-subscriber, wake up to the importance of immediately subscribing to the Campaign Fund? You are receiving the benefit of our publicity—we cannot prevent that, even if we should wish to do so. Our Campaign is conducted on broad lines, as it ought to be—but who should pay for the publicity if not those who receive benefit from it? He must have a heart of flint who will not contribute his mite to the Fund. Our Committee works hard to make every dollar count in the publicity—and the detail work in connection with it is costing very much less such work has cost most other Campaigns. There is no wastage, not a penny goes astray, nor is likely to under the sharp eyes of the gentlemen who are directing the Campaign, and are prominent contributors to the Fund themselves.

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November 15, 1919.

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2000	Perle Brillante Improved Grand Maitre	1600	7.50	60.00	5000	La Reine, pure white, shaded pink	22.00
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5000	Artus, bright scarlet	1000	\$20.00	3000	Grand Primo	28.00	
5000	Belle Alliance, scarlet	1000	22.00	YELLOW CALLAS			
5000	Chrysolora, finest yellow	1000	22.00			100	1000
5000	Cottage Maid, soft pink	1000	22.00	Yellow Callas, size 1½ to 1¾ inches		\$20.00	\$175.00
5000	Cramoisi, brilliant extra red	1000	22.00	Yellow Callas, size 1¾ to 2¼ inches		25.00	200.00
5000	Gold Finch, pure yellow	1000	22.00	Godfrey Calla Roots, 2¼ to 3 inch circ.		20.00	

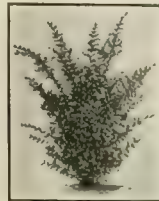
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BIRD'S NEST FERN. Excellent stock, 2½-in., \$18.00 per 100; 3-in., \$27.50 per 100.

CARNATION CUTTINGS

Booking orders for December 15, and later. We are well prepared to supply in quantity and our growers have a high reputation for the quality of cuttings produced for years past. Have made special arrangements to supply LADDIE, MORNING GLOW and PINK DELIGHT from clean stock plants grown only for propagation purposes.

NEW CARNATIONS

	100	1000
ETHEL FISHER (Peter Fisher) scarlet.....	\$14.00	\$115.00
BERNICE (Howard) crimson.....	14.00	115.00
RUTH BAUR.....	12.00	100.00
LADDIE.....	10.00	90.00
MORNING GLOW.....	7.00	65.00
WHITE BENORA.....	7.00	65.00
PINK DELIGHT.....	7.00	60.00
HERALD.....	7.00	60.00
ROSALIA.....	7.00	60.00

Aviator, Belle Washburn, Doris, Benora, Rosette, Enchantress Supreme, White Enchantress, Beacon, Ward, Good Cheer, White Perfection, White Wonder, Miss Theo—\$6.00 per 100; \$50.00 per 1000. Matchless, Nancy, Alice and Enchantress—\$5.00 per 100; \$40.00 per 1000.

FERNS for fern dishes. As- 100 1000
sortment of best sorts,
2½-in. \$6.00 \$55.00
3 -in. 12.00

KENTIA Belmoreana. Strong Doz. 100
2½-in. \$1.50 \$12.00
3-in., \$25.00 per 100. 4-in., 50c. each

IVY, English. 3-in., \$8.00 per 100.

CINERARIA

Selected strain, 2½-in., \$7.00 per 100; \$65.00 per 1000.

WINTER FLOWERING FORGET-ME-NOT. Best Boston Market Forcing Strain. \$7.00 per 100, \$65.00 per 1000.

SNAPDRAGON. Ready now. Nelrose, Silver Pink, Enchantress, Keystone, Phelps White and Yellow, 2½-in., \$6.00 per 100, \$55.00 per 1000.

BEGONIA MRS. M. A. PATTEN. Dark sport of Chateleine. Buy now and have them ready for Xmas. 2½-in., \$10.00 per 100.

Boston Yellow Marguerite

We offer a carefully selected strain, grown by a specialist in this line and furthermore send out no blind plants. They are worth the price. 2½-in., \$10.00 per 100; 5½-in., heavy blooming stock for quick results, 50c. each.



BEGONIA. A good offer in Melior and Cincinnati. Strong, bushy plants from leaf cuttings. 3½-in. ready to repot in to 5-in. at 50c. each. 2½-in. from top cuttings, strong plants, 25c. each.

CYCLAMEN. Blood red, salmon, crimson, white carmine eye, 4-in. ready for 5-in., 50c. Big, fancy plants in 5-in. pots at \$1.35 each.



SIM'S YELLOW POLYANTHUS

THE BEST ON THE MARKET

Winter flowering clumps ready now. \$8.00 per 100 - - - \$25 per 1000

Asparagus Plumosus Seed

Massachusetts greenhouse grown. 1000 \$3.00; 5000 \$13.50.

Coeleus Trailing Queen

Fine for mixed pan, basket and hamper work. 2½-in., \$6.50 per 100, \$60.00 per 1000

TWO NEW FERNS

NEPHROLEPIS MACAWII

A Winner

2½ in., \$20 per 100.

THE VICTORY FERN

(Nephrolepis Victoria)

Bronze Medal at Detroit.

Per Doz. Per 100

2½ in. pots..... \$3.00 \$20.00
3½ in. pots..... 7.50 20.00

OTAHEITE ORANGES, for growing on, 2½-in., \$20.00 per 100.

LATANIA Borbonica, Fan Leaf Palm, 3-in., \$30.00 per 100.

ARECA Lutescens, 2½-in., single plants, \$15.00 per 100; 2½-in., made up three plants to the pot, \$20.00 per 100.

ASPARAGUS Plumosus, seed- 100 1000
lings \$8.00

2½-in. \$5.00 45.00
3-in. 10.00

Sprengeri Seedlings..... 7.00
Sprengeri, 2½ in 5.00 45.00
3-in. 10.00

CHRISTMAS JOY PEPPER. Heavy. 4½-in. pots, \$30.00 per 100. Well set with Berries and colored. A Bargain.

Crotons

Nice 2½-in. plants. Get your stock now and be ready for your mixed pans and hampers for the holidays. A good assortment of highly colored sorts both broad and narrow leaf types. \$35.00 per 100.

Dracaenas

Godsefiana, Sanderiana, Lord Wolseley, Kelleriana and Terminalis. They are highly colored and just right for mixed pans and hampers for the holidays. You will save money by getting them now. Strong, 2½-in. pot plants, \$25.00 per 100; 3-in., select stock, \$40.00 per 100.

GYPSOPHILA SEED (Nicholson's Forcing Strain)

Earliest and Best

¼ oz., \$50c.; ½ oz., \$5c.; 1 oz., \$1.50

GIGANTEUM LILIES

We still can supply ALL SIZES.

Let us quote you RIGHT PRICES on best quality and amount you want.

Next lot due now. Ask us about special offer on 6½ 7 size. It will interest you.

Easter Sunday (1920) falls on April 4th

Let us quote you on Ramblers and Baby Ramblers. One year old plants, excellent for growing on. We have the best sorts and in quantity.

10,000 Hydrangeas. Otaksa and best French sorts. 3-inch, \$12 per 100; 6-inch, heavy, \$40 per 100; 7,000 2½-inch at \$7 per 100, \$65 per 1,000.

Pelargonium Easter Greeting, also mixed, including four best sorts, 2½-inch, \$12 per 100. 500 White Baby Rambler Catherine Ziemet, forcing stock, immediate shipment, \$30 per 100.

Cash or satisfactory trade references. No C. O. D. Shipments.

L. J. REUTER CO. Plant Brokers

15 Cedar St., Watertown, P. O.
BOSTON, MASS.

HORTICULTURE

Vol. XXX

NOVEMBER 22, 1919

No. 21

THE TALK OF THE TRADE

From all reports the advance sales on gladiolus bulbs for the coming season have been unusually heavy, and as I predicted some time ago some of the old standbys will bring prices on a level with the fancy and more recent introductions. A grower who forces heavily each season told me recently that the *Primulinus* hybrids gave him better returns than anything he planted. A well known authority estimates that from one hundred bulbs of any of the good forcers a return of eighty to ninety cut blooms is fair, while from the same planting two hundred and sometimes as high as two hundred and fifty blooms can be cut from one hundred bulbs of *Primulinus*.

Another point brought out is that the *Primulinus* produces more choice blooms from the medium to smaller bulbs. It has been found that the largest bulbs average a poorer type and color of flower. It has been demonstrated for a number of seasons past that the *Primulinus* hybrids are decidedly popular in the market, which of course means that the buying public has taken to them.

It would be hard to find a better lot of carnations in every way than those in the houses of William Sim at Cliftondale, Mass. You will see in quantity the best of the commercial varieties. Laddie, Pink Delight and White Delight are grown heavily and are in especially good shape for this time of the year. Mr. Sim has several seedlings which will bear watching. A variegated which reminds one of the old Mrs. George M. Bratt looks particularly promising. This, we understand, Mr. Sim will call Kiltie. He also has a cerise of promise to be called Romeo. They will be given a thorough tryout this winter, and we

may expect to see more of them through this season.

While a yellow carnation is never grown in great quantity, there is always room for a good one, and it has been years since we have had one really worth growing. Sunshine, coming from E. A. Strout of Biddeford, Me., gives great promise, however. It is a sturdy grower, of good size, nice form, and is clear yellow with enough color in it to show the yellow under artificial light. Mr. Strout's White Delight is also well thought of by all growers who have done so well with Pink Delight. White Delight will be introduced next season with Sunshine.

James Wheeler of Natick believes in growing varieties that are productive and good keepers, and pays less attention to size. All of his stock looks well, but a cerise variety and a variegated one of his own are among the best paying sorts. Neither are very large, but they have the old wiry, quick growth after the style of Lizzie McGowan and William Scott. They keep so well and ship so well that he has a steady call, and the average price will run well up to the fancy varieties. Mr. Wheeler is growing a large house of Godfrey Callas planted right into the ground. They are in

good shape now and are starting to bloom. This is more or less of an experiment, but from indications now it would seem that it will turn out well.

Speaking of Godfrey callas, M. A. Patten Co. has a house that is turning out a fine crop of blooms now; in fact they have been cutting since about the first of October. The Patten Company we think are as successful with Godfrey callas as anyone around this section. They also are keeping up to their fine reputation with some fancy stock of Mignonette. It is as fine now as one would expect to see in January. One always thinks of these people as specialists in carnations, but a large quantity of *Adiantum* is grown here, mostly hybridum. They have a steady call—in fact cannot cut it fast enough now to keep up with the demand.

Most all of the carnation men are well started now with their propagating; in fact, thousands of cuttings are being boxed, with quantities going into the sand every day. It seems to be the earliest season that I can remember, and stock is turning out fine, but advance orders would indicate that there is to be a very heavy call for this season.

All of those growers having Edward Winkler's carnation Morning Glow are as usual very well satisfied with this variety at this season of the year. If



Well Grown Poinsettias

there has been a "bread and butter" carnation put on the market the last few years, I think Morning Glow can be classed along with the best.

This is the season of the year when Poinsettia has its popularity, and its time is shorter than almost any other popular plant of the year. There surely is an immense quantity to be offered for the holiday trade this year, and already those beautiful combinations of poinsettias, ferns, crotons, begonias, erica and other suitable plants are seen in the greenhouses getting established in the pans before starting for the store. The last minute made-ups will not stand up with those that have had a few weeks' time to get a foothold.

Some of the growers think very well of the California poinsettia. They claim it is an easier grower than the common, less inclined to drop its leaves, branches more readily and stands cooler and greater changes in temperature. These are all good points and I hope they are true. On one point we are sure, the California poinsettia is a heavier grower.

George M. Geraghty, president of the Canadian Retail Florists' Association, expects to have a meeting of the Executives about the first of December so that organization may be completed at once and arrangements made for a big convention in Hamilton next year along with the C. H. A. There have been many requests regarding membership in the Retail Association. Others should communicate with the secretary, Silas McFadden.

WINTER WINDOW BOXES

It is interesting to note that many of the hotels as well as other buildings are making free use of outside window boxes filled with winter greenery. As has been said in *HORTICULTURE* before, this work offers an opportunity which has been neglected to a considerable extent. There are many occasions on which florists as well as nurserymen might work up a business of this kind. This is looking at the matter in a general way. But besides the use of the window boxes on business or public buildings there is no reason why they should not be made use of to a far greater extent for private homes. In many instances the owners do not realize what can be done to beautify their homes by the use of evergreens, both indoors and out. Many times, no doubt, a suggestion from the head gardener as to what could be done in this way would be appreciated.

One point to remember is that the box itself is much more in evidence in winter than in summer and that it should harmonize with the exterior decoration of the house. It will not be masked by drooping plants for most of those used in winter will have an upright form of growth.

Some firms are putting out window boxes with the evergreens arranged in them. These plants have been especially prepared for use in this way. This is an important point because much depends upon the way in which the little trees are removed from the nursery to the box. It is surprising to find the gradation in colors which can be obtained by careful choice of subjects

Among good little trees may be included the Colorado blue spruce, silvery green, the white pine, silvery gray, the Norway spruce, dark green, the red cedar, dark green, the white pine, silvery green, and the American arborvitae, light green. In many instances it is preferable to use only one kind of plant, especially in small boxes. Several little spruce or arborvitae, for example, may give a better effect than a mixture. On the other hand, there are occasions when the effect is heightened by having several different plants used together. The use of evergreens in winter is not confined to the outdoor window box, however. There are many kinds which are very attractive when displayed in pots, urns, and jardineres, either indoors or out. Perhaps their value as potted plants is not generally recognized. Nevertheless they are very satisfactory, especially in homes where the rooms are large and where it is not possible to give much attention to the plants. They may be large enough to stand by themselves on the floor or small enough for a place on the table or the window sill. Many of them begin to make growth after being kept indoors for a while and the little new ends are very pretty because of the delightful shades of green which they possess. These little trees are specially to be prized for sun parlors, porches and balconies. They are well adapted for the decoration of hotels, restaurants and the like, and it seems quite probable that more of them would be used if their sale were pushed a little harder.



Window Boxes at Copley Plaza, Boston

AS TO BILLBOARDS

More Interesting Letters on the Subject

Mr. McFarland has stated to HORTICULTURE that he does not want to be placed in a false position as regards billboard advertising and that he does not oppose the use of signs on one's own property. Some correspondence which he has been having with W. R. Pierson sets forth this fact and also shows where Mr. Pierson stands. Mr. Pierson's letter and Mr. McFarland's reply follow:

Cromwell, Conn.,
Oct. 25, 1919.

My dear Mr. McFarland:

I want to thank you for your very interesting letter of the 20th with regard to the affairs of the American Rose Society.

I also want to tell you that I disagree entirely with you on the question of billboards—not billboards as you see them, but billboards as we intend to use them in the "Say It With Flowers" campaign of the Society of American Florists. Your very sarcastic comments upon the action of the Committee in recommending the use of billboards containing merely the slogan of the Society, and your statements that the funds are to be taken out of the contributions made to the Publicity Fund are all wrong. In the first place, there is no intention of touching the money contributed to the Publicity Fund. These billboards are to be purchased by the florists. They are not unattractive and are to be erected only on property owned by florists in connection with the front of their establishments. We are going to use them and I believe we are right in doing so. I think your attitude in the matter is all wrong.

I want to have the privilege of telling you occasionally that I disagree with you, and that is my reason for writing you as above

Very truly yours,

W. R. PIERSON.

Harrisburg, Pa.,

Oct. 27, 1919.

Dear Mr. Pierson:

Surely you are proper in disagreeing with me, and frankly friendly in telling me so.

What I wrote about the signs was altogether on the information that I had. That is, I commented on what had been published. I have never objected to a respectable sign on a man's own property advertising the things he had there to sell. How could I ob-

William W. Edgar Co.
FLORISTS
WAVERLEY, MASS.

"THE HOUSE OF SERVICE"
Call Belmont 600

SEASONABLE FLOWERING PLANTS
Cyclamen, Begonias, Primulas, Chrysanthemums, Peppers, Jer. Cherries, Paper Whites, etc.

Visitors Always Welcome

THOMAS J. GREY CO.
16 SO. MARKET ST. BOSTON, MASS.

JUST ARRIVED
LILIUM GIGANTEUM
Will Have Cold Storage Giganteum Later

CANNAS
A large stock of several varieties. PRICES RIGHT. Let us book your order now for shipment at any time.

PARKER BROS. NURSERY CO.
FAYETTEVILLE - - ARKANSAS

ject unless I was either a prig or a fool?

You may see, therefore, that my attitude is not exactly what you assume it to be. I do object to the character of signs about which I wrote, and which were the sort of signs implied in the announcement printed to which I took exception.

I guess we are not very far apart, after all.

Yours truly,

J. HORACE MCFARLAND.

STILL MORE LETTERS

The following correspondence explains itself:

Nov. 16, 1919.

Dear Sir—The enclosed is copy of a letter from Mr. F. T. Hopkins of the National Outdoor Advertising Bureau. I thought you might be interested in reading it. Yours very truly,

P. F. O'KEEFE.

Fifth Ave. and Broadway,

New York, N. Y., Nov. 8, 1919.

Dear Major O'Keefe:

Your letter to the Editor of HORTICULTURE, in reply to the letter of J. Horace McFarland, leaves nothing for me to add. It is surprising that HORTICULTURE would publish a letter which

is so obviously vicious and written without even a tinge of truth.

It is a pity that legitimate businesses should be defenseless against such vicious and uncalled for attacks by unscrupulous radicals of this character. The statements in Mr. McFarland's letter are so palpably and obviously false as to need no refutation, although I suppose it is a fact that some uninformed individuals might be influenced by this sort of dirty propaganda. Certainly every individual has a perfect right to his own personal opinion and his own standard of ethics, business, etc., but too many individuals today are making a living through their capacity to spread a propaganda destructive to the constructive efforts of those who are really responsible for the development of American business.

We are very glad indeed to note the interest you have taken in replying to this unjustified attack and in all justice the Editor of HORTICULTURE should certainly give the prominence to your reply that he has given to Mr. McFarland's letter.

Yours very truly,

F. T. HOPKINS.

National Outdoor Advertising Bureau.

HORTICULTURE

Established by William J. Stewart in 1904

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NOVEMBER 22, 1919

NO. 21

PUBLISHED WEEKLY BY
HORTICULTURE PUBLISHING COMPANY
78 Devonshire Street, Boston, Mass.

EDWARD I. FARRINGTON, Editor.
Telephone Fort Hill 3694

ADVERTISING RATES:

Per inch, 30 inches to page..... \$1.25

Discount on Contracts for consecutive insertions, as follows:

One month (4 times), 5 per cent.; three months (13 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.

Page and half page space, not consecutive, rates on application.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1897.

Judging by their public activities the florists of no city of the country are more alert and enterprising than those of Buffalo, unless it be possibly those of Washington. By their systematic advertising and their success in getting the newspapers to carry on a campaign for the wider use of flowers, they have done much to push the business. In many ways Buffalo seems to be especially alive. This is shown by the free municipal flower shows which have just been resumed. The show this year was held in Elmwood Music Hall and attracted great numbers of people. It was carried out under the direction of Commissioner Malone of the Department of Parks and Public Buildings, and the flowers shown were largely those from the city's own greenhouses. Of course chrysanthemums were most in evidence, but as there are few flowers which make so strong an appeal to the public in general this was a winning feature.

Sunday afternoon there was an excellent organ recital to help make the show a success. There was also organ music on other days, with orchestra music by way of variation.

The arrangement of the flowers was not the set display so common at flower shows. The hall, on the contrary, was blocked off into mammoth flower gardens with more than twenty-five beds filled with blooms. In the center there was a large parterre which was changed daily. At each end there was a fountain banked with palms and statuary. An alley of box trees led from the main entrance direct to the parterre, which made an entrancing picture. The balcony was transformed into a large pergola, having window boxes and vine covered lattice work.

Now here certainly was an example of municipal helpfulness which must have been of the greatest value to florists. We have no doubt that the trade in Buffalo gave every assistance to the city authorities in making the affair the great success that it was. Certainly they could well afford to do so, for this exhibition must have given a tremendous impetus to the sale of flowers and the development of the florists' business. Why shouldn't the florists of other cities go to work quietly to arouse a demand for a similar exhibition? If it can be done in Buffalo, it can be done elsewhere.

Flower week

What a difference there are in cities! Some of them have responded promptly and enthusiastically to the suggestion of a "Say It with Flowers" week. Others have made a half-hearted attempt to carry out the idea. Others have turned the proposition down cold. New York, curiously enough, seems to have been among the last named. A few of the most enterprising florists tried to start the ball rolling, but only to have it fall to pieces against a blank wall. The florists of Brooklyn did a little better. Perhaps there was good reason for all this. New York has had a good many special occasions of late and perhaps was not able to respond to another stimulus. Still there is Washington, which has had no lack of celebrations, too. And the florists of Washington made a tremendous success of "Say It with Flowers" week. So well did the affair go over there that there is talk now of repeating it annually. Certainly it was an inspiration to distribute flowers all over the city by means of aeroplanes and the idea of sending flowers for display on the pulpit of every church on Sunday was also a good one. Perhaps, by the way, it will be an excellent plan for somebody to pool the best ideas originating in all the different cities so that they will be available for similar occasions next season.

The florists of Albany prepared a special float which traveled about the city all the week and made so much of a hit that it is likely to be borrowed for use in other cities. Boston did not develop as elaborate a program as it had been hoped, but used display advertising in all the newspapers, and aroused considerable interest by a parade on Armistice Day after which flowers were distributed to all the hospitals. By submitting photographs and reports to the newspapers a great deal of extra publicity was obtained. Most of the papers had special Sunday articles, and it is to be recommended that the florists of all cities make a point of keeping newspapers informed about matters which would be of public interest. Oftentimes it would pay local florists' associations to have a regular press agent.

The fact that the newspapers are willing to co-operate with the florists is seen by a recent happening in St. Louis. There the florists combined to insert a large advertisement, and one of the leading Sunday papers contributed a full page story dealing particularly with the chrysanthemum. Publicity of this kind is of the greatest value, and when it can be obtained gratuitously certainly should not be overlooked.

Good advertising

We do not know who is responsible for the advertising copy which is being put out by the S. A. F. this month, but we do know—or at least we are convinced that we do—that no better advertising of flowers and the florists' telegraph delivery has ever been done. We have just been reading the advertisement as it appears in the American Magazine. The display itself is excellent, the eye being instantly caught by the illustrations. The text is well constructed, concise and convincing. It has a suggestion of sentiment, but mushiness has been avoided. It is advertising which makes a direct appeal and which should sell flowers. We congratulate the man who prepared the copy and the S. A. F. on the opportunity to use it. We also suggest that the value of this advertising to the whole trade should not be overlooked. Every florist will profit, even those in the smallest town. Surely it is not very commendable for any member of the trade to sit back and reap the reward of all the work which is being done to promote the sale of flowers without doing his part in paying the bills.

ROSES UNDER GLASS

By ARTHUR RUZICKA

With the warm and foggy weather that we have been having most of the time it will be necessary to be very very careful as to the amount of feed that is applied, and also as to the kind that is used. With clear weather one cannot make any big mistake, but with weather such as we have been having right along, it will not do to saturate the benches with almost anything that comes along. Bonemeal can be safely applied to plants that are growing. Apply it in small quantities, and more often. Use enough mulch to keep the surface of the benches open, and keep the houses as cool as possible though not chilly by any means. A little heat will be fine, and leave the ventilator open to keep the air fresh and sweet. The manure that is applied as mulch should be well decayed, otherwise it is likely to result in a weak spindly growth that will take mildew very easily.

As soon as the weather begins to get clear and cold, a little liquid manure can be used to good advantage, but only on plants that are growing freely, and are well able to take it. The best time to start applying it is when a new crop is coming on, and the new growths are about three inches long. Begin then, and feed once a week until the buds show, and then omit the feed until a crop is cut off, and the plants start once more. If the houses are not being cropped, but are being grown to cut all the time, it is a good policy to apply liquid manure one week, and bonemeal or blood and bone the next, using light doses and keeping on feeding all the time. Private growers with only a few plants or only a small house or two would do well to put a mixture of manure and bonemeal into a barrel, filling this up with water, and letting it stand in a warm place. Then apply it to the plants with a large dipper. It is not a pleasant occupation to be sure, but the results are great, and it is well worth while to do this if at all possible.

Tying.

Do not neglect this end of the work, especially in the Beauty houses. As soon as the plants begin to lay around, there is sure to be a start of spider and spot, two of the worst things Beauty growers have to contend with. In tying, be sure to distribute the wood well so that it will not be in bunches.

CHRISTMAS PLANTS

Cyclamen, \$1.50 and up; Begonias, 75c to \$2 each; Poinsettias, single, 50c, 75c and \$1 each; pans, made up with Ferns and Peppers, \$1.50 to \$4 each.

FERNS, Scottii, Verona, Boston and Roosevelt, 50c to \$2 each.

FRANK EDGAR,

Waverley, Mass.

ANNOUNCEMENT

The New Crimson
Carnation for 1920

BERNICE

Orders filled in strict
rotation for December
and January delivery

STOCK LIMITED

WRITE FOR DESCRIPTIVE CIRCULAR

PRICE: { \$ 14.00.....per 100
115.00.....per 1000

W. D. HOWARD,

Milford, Mass.

Where it is necessary to bend down some of the wood, bend it toward the west, and see to it that the tops are kept even, so that all the growth will have an equal chance to get the sun. When tying put the string around the wire once before bringing the shoot to the wire and tying the knot. If this is not done the growth will slip around when the plants are syringed, and the result will be that the plants will lay around as if they were not tied. When tying Teas, do not use one string to go all around the plant, holding it altogether. Tie each branch separately, and do not bunch the plants too much. If the plants are bunched they will lose a lot of leaves and are likely to get spot, or spider. Then, too, if the plants are properly tied, they will break far more freely, than they would otherwise, and the more they grow the better for the grower.

The Xmas Crop

Right now will be the time to look for Xmas. Go over the plants and pinch all the short growth. If your market will call for shorter grades of roses, let the two buds come. If, however, long stuff is needed, disbud all breaks, save the best one, and let this come on. With good culture, a nice long stemmed rose will be the result. Feed, water, ventilate very carefully so that the crop will be brought on perfectly clean, and as near perfect as is possible. A poor crop will be a big disappointment when the returns come in.

The Sod Heaps.

If the soil is not put up as yet for next spring's use, do not neglect to get as much of it in as possible. The spring will be very wet no doubt so that it will take a long time before the meadow is dry enough to plow, and the sod in shape to haul. Perhaps it has been too wet right along, but if there is a least chance, get the work done. At least get in a stock of manure, a heap as large as can be so that it will be there when the time comes to use it. Heap it up where it will be possible to get at it and turn it over every once in a while, and where it will not wash away when heavy rains set in.

OBITUARY.

John T. Shore.

John T. Shore, organizer of the Westchester County Horticultural Society and for twenty-five years superintendent of the late John Sterling's extensive estate at Harrison, is dead, after a long illness. He was seventy-six.

Mr. Shore was one of the organizers and a charter member of the Harrison Fire Department, and for fifteen years was its president. He was a trustee of the Union Free School, district 6, for eighteen years and was an elder in the Harrison Presbyterian church. He was a Mason and a member of Port Chester Council, Royal Arcanum.

S. A. F. & O. H.

NATIONAL PUBLICITY CAMPAIGN

THE BILLBOARD PROPOSITION



Have you a site for a billboard as depicted in this illustration? Public highways, land bordering railroad tracks, tops of buildings, vacant lots, all furnish excellent locations for billboards.

Help the Publicity Campaign along by purchasing a billboard—and hang beneath it a supplementary sign advertising your own business, if you desire to do so.

Our Promotion Bureau will ship a billboard to you for \$50 cash with order—half what it would cost you on a direct purchase from factory.

Description—Size, 20 feet long, 7½ feet wide. Construction, 26 ga. galvanized iron, on wood frame, shipped in four 5 feet sections, with face bands. Approximate weight, 300 pounds. Slogan on sign painted to conform in design and color to the regular glass and transfer signs supplied by our Promotion Bureau. Three coats of paint used, with a coating of heavy outside wearing varnish. Wooden supports to be supplied by purchaser. Blue prints or drawings detailing setting up furnished with each billboard.

Signs should be located within a distance of 50 feet from highway or track.

The price, \$50.00, is F. O. B. any railroad station in the United States.

Send your order in at once, and have a billboard working for you quickly.

1170 Broadway, New York City

JOHN YOUNG, Secretary.

ASPIDISTRAS RATHER SHORT.

It is becoming apparent that there is a certain shortage in Aspidistras, and prices have gone higher than ever before. The same situation prevails across the water. Moreover many of the plants over there are developing many unhealthy conditions, and the question comes whether the endurance of this plant has not been tested to the limit. A writer in *The Garden Illustrated* says:

"It must be remembered that, although the Aspidistra will bear with impunity as much or more rough treatment and neglect than any other plant, there is a limit to its endurance, and the time comes when the result of such treatment is very apparent in the foliage. Where the plants have to be kept continuously in a living-room a great point in the culture, besides careful attention to watering, is to keep the foliage scrupulously clean by occasional sponging, or, better still, by standing the plants outside for a time during a steady light rain. After the leaves are thoroughly wet, passing the sponge over them will remove all impurities.

"Although the plants may remain in the same pots for a very long time

there comes a time when a shift is beneficial, and this is generally indicated by a slight discoloration of some of the leaves. In all cases where the culture of the plants is confined to the living-room and outside, this repotting should take the form of a shift into a slightly larger pot and no attempt to split up the plants. This latter is only admissible where facilities are available for growing the pieces along in warmth for a time until they are well established in their new quarters.

Attempts to throw split-up pieces in the atmosphere of a living-room very often end in failure. This applies more especially to the variegated form, which is less vigorous in growth than the type. In connection with the repotting above mentioned it may be well to give the reminder that as only a small shift is advisable and there is, consequently, little space between the ball and the new pot, care should be taken that the soil is thoroughly and evenly rammed into position."

CHRYSANTHEMUM SOCIETY OF AMERICA.

The following is the report of new chrysanthemums submitted to the committee appointed by the society.

Exhibited at New York by Mount Greenwood Cemetery Association, Morgan Park, Chicago, Ill., Mrs. C. W. Johnson, white, Jap. inc., commercial scale, 95 points, exhibition scale, 95 points. Chas. H. Totty Co., Madison, N. J., Miss Moran, Bronze pompon, scale for pompon varieties, 87 points; No. 151, P., Pink pompon, scale for pompon varieties, 86 points.

Exhibited at Philadelphia by A. E. Bonsey, Sewickley, Pa., Evelyn Bonsey, Golden bronze large-flowered single, scale for single varieties, 89 points; Nancy Byers, Pink and bronze single, scale for single varieties, 71 points.

Exhibited at Chicago by Baur & Steinkamp, Indianapolis, Ind., No. 10817, Pink Jap., commercial scale, 91 points. Elmer D. Smith & Co., Adrian, Mich., Bright eyes, light pink pompon, scale for pompon varieties, 92 points; Angelo, pink pompon, 90 points; Zella, bronze pompon, 90 points; Baby Doll, yellow, tinge of orange pompon, 90 points; Fire Bird, deep bronze pompon, 93 points; Annetta, bronze pompon, 92 points.

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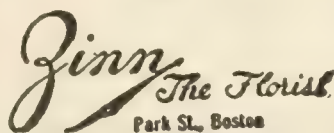
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**ANNUAL MEETING OF THE MASSA-
CHUSETTS HORTICULTURAL
SOCIETY.**

The annual meeting of the Massa-
chusetts Horticultural Society was
held in Horticultural Hall, Boston, on
Saturday, Nov. 15, with Vice-President
Kidder in the chair. Mr. Kidder an-
nounced that the Trustees had ap-
propriated \$7500 for six exhibitions dur-
ing the ensuing year and that Miss
M. R. Case of Hillcrest Farm, Weston,
had contributed \$1000 for four addi-
tional exhibitions.

The following named officers of the
society for the year 1920 were elected:

President, Wm. C. Endicott; Vice-
President, C. S. Sargent; Trustees for
three years, Albert C. Burrage, Ernest
B. Dane, Edwin S. Webster and Fred
A. Wilson; Trustee for two years, Ar-
thur H. Fewkes; Nominating Com-
mittee, Oakes Ames, William Ander-
son, John K. M. L. Farquhar, Samuel
J. Goddard and John E. Thayer.

An interesting feature of the meet-
ing was an exhibit of a large collec-
tion of Cypripedium orchids of numer-
ous species and hybrids by Albert C.
Burrage, Douglas Eccleston, Superin-
tendent. It was awarded a silver
medal.

Mr. Burrage exhibited also a plant
of Laelio-Cattleya, Alice Burrage,
never before shown. It is a cross be-
tween Laelio-Cattleya Lustre and Cat-
tleya Reubens. This was also awarded
a silver medal.

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RAMBLING OBSERVATIONS OF A ROVING GARDENER

There is much satisfaction in reading from time to time about the formation of new garden clubs in different parts of the country. It is evident that interest in gardening is growing apace. Possibly it was given an impetus by the war. At any rate gardening is being taken up more enthusiastically, it seems to me, than ever before. Moreover, there is a tendency to do it in a better way. Amateurs in particular are eager to learn about the best plants for garden effects and are expressing interest in the making of good color combinations.

To a large extent apparently these clubs are made up of women which leads one to the belief that women are to play an important part in the development of the garden movement which is now taking place throughout the country. Indeed, if it were not for the women who are interested in the making of gardens it is doubtful if very great progress would be made at all.

For a long time a great gulf seemed fixed between the pretentious gardens of the rich laid out by landscape architects of note and cared for by professional gardeners and the little backyard garden of the average home maker whose love for flowers was far greater than her knowledge. Now this gulf is being bridged through the aid of the garden clubs which are teaching even those who have only a small amount of ground available to make the best use of the space and to bring about results which are just as harmonious if less ostentatious than those of the big estates.

The members of garden clubs are able to have lectures and talks by men and women who are particularly familiar with certain lines of garden work or experts in the growing of particular flowers. Certainly there is no better way to learn about the different plants than to have a practical talk, possibly accompanied by a demonstration at the hands of someone fully conversant with his subject. When Robert Pyle comes to a club to talk about roses the members of that club are going away with a new appreciation of the rose as a garden subject as well as a better understanding of how to make their roses flourish. Bertrand Farr, of Wyomissing, by his pictures and his descriptions is able to arouse any flower lover to new heights of enthusiasm for the peonies and the irises.

Mrs. Hammond Tracy, of Wenham, Mass., can tell much about the gladiolus which the average person never knew before.

So many garden clubs have been organized that it is proving rather difficult sometimes to get a list of available lecturers for preparing a course. I happen to know that the editor of *HORTICULTURE* has been getting together a list of the men and women who are available for lecture work and I have no doubt that he will gladly send this list to any who apply for it. Probably, too, he will be only too glad to have the names of people who are open for engagements. Perhaps *HORTICULTURE* can become a sort of clearing house in this matter.

After all, though, it isn't necessary to have an experienced lecturer at a club meeting. Not long ago I happened to attend a meeting at which J. K. Alexander, the dahlia grower of East Bridgewater, Mass., was present. Now, Mr. Alexander does not claim to be a lecturer, but he was able to give a very entertaining and helpful practical talk, for he had with him many dahlia blooms by which he was able to illustrate the various types and forms. He also had a clump of dahlia roots which he divided in the presence of the club members in order that they might learn just how this work should be done for best results. A demonstration talk of this kind is exceedingly valuable. There are few garden clubs which cannot induce local growers or professional gardeners to help them out by talks of this character.

NOVEMBER.

Gray November has been with us this autumn with few blue days among the gray ones. Yet the gray sombre skies set off the beauty of the grasses shading from browns and yellows to exquisite shades of rose. Most of the leaves have fallen, but how beautiful the rich red leaves of the blue berries are against an old gray stone. Is there any season when one more enjoys the colors of an old stonewall; yellows, greens, manves, reds, blacks, whites and grays. Our fields become very tempting to a painter in November.

The bright blaze of October is over with its flaunting red and yellow maples, but the softer beauty of November is none the less charming. The trees have lost their leaves but

how beautiful is the delicate tracery of the elm trees, the oaks, the friendliness of a gnarled old apple tree, contrasting in all the detail of their outlines with the dark dense beauty of the cedars and pines. The sunsets assume a new beauty. We can see more of the horizon than in the summer and then we have the outlines of the trees against the deep red skies.

M. R. CASE.

Hillcrest Farm, Weston.

November, 1919.

THE BLACK ROT OF GRAPES

The most serious menace to grape growing in most sections of the United States is the black rot (*Guignardia Bidwellii*) a fungus of American origin, the effects of which have been known for considerably more than half a century.

Its ravages are more serious under the conditions which commonly encourage the growth of parasitic fungi; that is, moist, warm days, or the muggy weather of midsummer, being particularly favorable for its rapid development and spread.

The black rot fungus occurs upon the berries and leaves and sometimes on the young canes. The berries are most seriously affected although the disease may first be seen upon the leaves. Upon the latter it appears as sharply defined, nearly circular brown spots.

After the usual pruning is done in the early spring, clean the vineyard or arbor as well as possible of the pruned and diseased litter, and destroy it by burning. The old berries in the vineyard should be covered by early plowing and those in the arbor should be scraped up and disposed of, or else spaded into the ground.

Sulco-V. B., at the ratio of 1 to 25, may be thoroughly applied, covering vines, posts and trellis just as the buds are swelling in the early spring. A second application of Sulco-V. B. at 1 to 50 should be made as the buds unfold, and subsequently the vines should be sprayed about every two weeks until 5 or 6 applications have been made. The nature of the season, however, will determine how late it will be necessary to continue spraying. If the season is warm and dry the first two sprayings will usually suffice. If the weather is unusually moist when the berries are one-half to two-thirds grown, it will be good insurance to spray them with Sulco-V. B. at 1 to 50 in order to protect them against attacks of the various fungus diseases and continue this protective spraying at bi-weekly intervals until the fruit is ripe.

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DISEASES OF GREENHOUSE PLANTS

A bulletin issued by the New Jersey Agricultural Experiment Station is devoted to the common diseases of ornamental plants. The following general treatment is recommended:

In the growing of ornamentals in the greenhouse the problem of controlling plant diseases is very closely associated with the art of greenhouse management. It is well known that character of soil, temperature, humidity, sunlight and many factors are important in successful greenhouse work. These factors influence the diseases as well as the plants. This subject is so extensive that we cannot give more than a very brief discussion at this time.

Mixed Crops. The failure in many greenhouses can very frequently be traced directly to the growing of different kinds of plants in the same house. If these plants require different degrees of temperature, humidity and sunlight, and since the house cannot be regulated to suit all of them at the same time, some must necessarily be failures.

Crop Rotation. The organisms which cause many of our plant diseases are carried from year to year in the soil. However, many of these

diseases are restricted to certain plants, some of them attacking only one variety and some attacking two or more varieties. Therefore, it is advisable to practice rotation of crops as far as possible.

Although this applies more strictly to field and garden crops, it can be practiced to an advantage with many ornamentals, especially those that are grown for commercial purposes.

Sanitation. It is well known that many diseases are carried over on the roots, leaves and stems of the plants of the previous year. When a disease has been severe on any crop, it is advisable to rake and burn the dead plants and rubbish. However, it is impossible to destroy all the fragments of the old plants, and therefore crop rotation also should be practiced. Many successful greenhouse men pick off and destroy diseased parts of plants and frequently entire plants as soon as a symptom of disease appears.

Manures and Fertilizers. Manures are the most desirable fertilizer for most crops, but are sometimes the source of very destructive diseases. Many growers throw diseased and decaying materials on manure heaps, from which the organisms of disease

are returned to the soil. Litter which has been used for bedding for live-stock is frequently thrown on the manure heap and then carried to the soil, thus carrying its disease back to the land.

Seed-Beds and Soil Sterilization. Seed-beds and cold-frames should be prepared with the greatest care in order to prevent infection of young plants before setting. In most cases manures are used in seed-beds and cold-frames, but the fact that certain diseases are carried in this way and that damping-off organisms thrive in the manure makes it desirable to use nothing but commercial fertilizers in some cases. (Of course when commercial fertilizers are used it may be necessary to use artificial heat.) It is advisable to put the seed-beds or cold-frames in a new place each year if possible, but if this is not done the old soil should be removed or both soil and woodwork sterilized. If the soil is removed care should be taken that it is all taken out, and carried a considerable distance away. A small amount of soil left in the beds is frequently sufficient to perpetuate the disease. If the soil is not carried away from the bed small particles are likely to be returned to the bed on implements or on the feet or hands of the

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workers. The woodwork of the seed-beds should be thoroughly drenched with either hot water, a solution of formaldehyde (1 pound of formaldehyde in 20 gallons of water), Bordeaux mixture, or strong lime-sulfur mixed with whitewash. If the old soil is used, or if there is any reason to suspect that new soil is infected, it should be sterilized with steam or formaldehyde.

Soil Sterilization is usually used in seed-beds, cold-frames and green-houses, but is sometimes used on soil in the open. The most common methods are the use of formaldehyde and of steam.

The soil to be treated should be loose and moist. Formaldehyde solution (4 pounds of formaldehyde to 50 gallons of water) should be applied at the rate of 1 gallon to each square foot of soil surface. In case the soil is very loose it may be necessary to make the application slowly over several hours, otherwise the liquid will run through very quickly and be lost. The soil should not be stirred during treatment. Immediately after treatment the soil should be covered with burlap, old carpet, fertilizer bags or paper for two days. It should then be aired for ten days or two weeks, and during this time should be stirred thoroughly three or four times. If this is not done the seed may not germinate well.

The most common method for steam sterilization is known as the inverted-pan method. The pans can be made of No. 22 galvanized sheet iron or pine tar lumber. For out-of-door work they should be made about 6 x 10 feet. They are attached to a boiler of 15 horsepower or more by means of a common 1-inch garden hose which connects with a nipple in the center of the pan. The edges of the pan should be pushed down into the loose soil and weighted. The steam should then be turned on and the temperature held at 200° to 250° F. for about one hour in order to get the best results.

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Isfactorily on shale soils or any other soil that tends to pack. Sometimes the first crop on soil subjected to high steam sterilization does not thrive, but the second crop is usually satisfactory.

Caution. Do not add manure or untreated soil to the seed-bed after sterilization; it may carry organisms of disease and cause infection. The diseases that persist in the soil can be very readily carried on the farm implements and also on the feet of the workmen and work animals. Therefore, it is usually necessary to take precaution to prevent infection of clean soil in this way.

Some diseases are carried on the work tools during the growing season. If these diseases are present, the crop should not be cultivated or harvested when wet from dew or rain, and the tools should be thoroughly cleansed or disinfected before using them on another crop which is susceptible to the same diseases.

Seed Selection. Some diseases can be avoided or held in check by seed selection. The seed should be selected from healthy plants that yield a product of the size and quality desired.

Cuttings. In making cuttings great care should be exercised in the selection of nothing but healthy plants. These cuttings should always be set in sand or soil free from disease organisms, preferably sterilized soil.

Resistant Varieties. The control of some diseases is so difficult and expensive and the results so uncertain that it is advisable to grow varieties resistant to the diseases in question. The susceptibility of some of our old varieties to disease accounts for their disappearance from the market.

Insect Carriers. The organisms of some diseases are carried by insects, and therefore it is very important to eradicate insects as far as possible.

Spraying. Our knowledge of spraying ornamental plants is rather limited. Some spray mixtures injure the plants and do more harm than good. The fact that a certain mixture can be used on special species or varieties without injury is not evidence that it can be used on others. It is always advisable to test the spray mixture on a few plants before using it on any considerable number of plants.

Ammoniacal Solution of Copper Carbonate. This mixture will not stain the foliage and therefore is frequently used as a substitute for Bordeaux mixture on ornamentals and on fruits just before ripening. However, it is a treacherous mixture and should never be used without first testing on a few plants. It is made as follows:

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Copper carbonate..... 6 ounces

Ammonia (26° Baumé) . 3 pints

Water 50 gallons

Dilute the ammonia with 15 pints of water. Mix the copper carbonate in a small amount of water to form a paste. Mix the paste in the dilute ammonia. Add enough water to make 50 gallons. Use immediately. It deteriorates very rapidly.

Potassium Sulfide (liver of sulfur). Mix 1 ounce of potassium sulfide in a small amount of water to form a paste. Then mix in 2 or 3 or 4 gallons of water and use immediately. This is the most satisfactory treatment for powdery mildew.

Dusting with Sulfur and Arsenate of Lead has proved to be an exceptionally good treatment for a number of diseases, as previously referred to in this circular. The sulfur should be ground very fine and mixed with arsenate of lead at the rate of 90 parts of sulfur to 10 parts arsenate of lead by weight. This mixture should be fine enough to pass through a 200-mesh sieve and may be obtained ready-mixed from a number of manufacturers.

CORRECTION OF ARDMORE REPORT.

Dear Sir—There are two serious errors in the report of the Ardmore show of this society published on page 415 of your issue of November 15th, 1919.

The report says "Mrs. George Drexel W. Childs" and "Mrs. Frank Thomson were among the prize winners."

The first name should have been, "Mrs. Geo. W. Childs Drexel." At this exhibition, Mrs. Drexel was not an exhibitor but offered several prizes.

Mrs. Frank Thomson has been deceased many years, and every year since her death, her daughter, Miss Anne Thomson, has offered prizes for cut blooms and plants of the variety, Mrs. Frank Thomson, in order to perpetuate this variety which was named for her mother.

Unfortunately, these two errors above effect two families who have been very good friends indeed of this society, and we ask you kindly to announce the correction in your next issue.

Yours truly,

DAVID RUST, Secy. Secretary.

WHY SHOULD YOU TRADE WITH US and JOIN the RANKS of OUR SATISFIED CUSTOMERS—

—BECAUSE—

IF IT'S IN THE MARKET WE HAVE IT AND HAVE IT RIGHT THE CHICAGO FLOWER GROWERS ASS'N

182 N. Wabash Ave. - Chicago

PLANTS TO EDGE BEDS OF LARGE SHRUBS

A correspondent of the Arboretum writes: "Can you recommend several shrubs suitable for edge planting before taller shrubs? I have used *Xanthorrhiza* considerably, but it is almost the only shrub that I find low enough for that purpose. I want to bring some Cornels down to the edge of a drive and I also want to plant in front of Privets and Thorns." There are not many shrubs with deciduous leaves which can be successfully used for this purpose. The best which has been tried in the Arboretum is the Fragrant Sumach (*Rhus canadensis*, or as it was formerly called *Rhus aromatica*). This widely distributed North American shrub rarely grows more than five feet tall, and when planted in good soil is often broader than tall with lower branches spreading flat on the ground, and upper branches erect spreading or drooping. In early spring before the leaves appear the branches are covered with clusters of small bright yellow flowers which in June are followed by dull red fruits which are pretty much hidden by the small compound leaves.

Among the small shrubs in the Arboretum few are more brilliant at this season of the year for the leaves turn gradually to bright scarlet and orange. The *Rhus* has been largely planted along some of the drives and this week it is a conspicuous feature of the Arboretum. The *Xanthorrhiza* has also been largely and successfully used here. It makes a neat border plant, and it is also well suited to grow under tall shrubs or trees. The *Xanthorrhiza* spreads rapidly by underground

stems which do not grow more than from twelve to eighteen inches high; the small purple flowers which are arranged in drooping clusters, appear as the leaves unfold; these are pinnate, of a cheerful green color and in the autumn turn pale yellow.

Some of the North American Roses might be used to edge beds or larger shrubs although most of them are too upright in habit to be really useful for this purpose. There is a dwarf from the Choke-berry (*Aronia nigra*) in the Arboretum collection which might be used to advantage for this purpose. Unfortunately, however, it probably cannot be found in commercial nurseries. This is true, too, of the dwarf

Quince of Japan (*Chaenomeles japonica*, sometimes called *Pyrus* or *Cydonia Maulei* in European nurseries). This is a shrub with spreading branches which do not rise more than two feet above the ground. The flowers vary on different plants from crimson to pink and to white, and are followed by small yellow, fragrant quince-like fruit. These handsome little shrubs, like the larger Quinces and many related plants, attract the San Jose scale, which needs careful watching and frequent spraying. All the Snowberries (*Symphoricarpos*) including the red-fruited *S. vulgaris* can be used in front of larger growing shrubs; and the trailing stems of one of the American Burning Bushes (*Evonymus obovatus*) make a good border when taller plants protect them from the direct rays of the sun.

DREER'S "Riverton Special" Plant Tub



No.	Diam	Eq.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton Tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

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HOT BED SASH

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10,000...\$2.25 50,000...\$9.75 Sample free.
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CUT FLOWER BOXES

EDWARDS FOLDING BOX CO.
MANUFACTURERS
PHILADELPHIA, PA.

Some of the low-growing Chinese Cotoneasters, like *C. horizontalis* with its varieties *Wilsonii* and *perpusilla*, and *C. apiculata* are well suited in habit to plant before larger shrubs. If used, however, with Cornels or Privets they might appear too exotic, and their proper place is in front of beds of the large-growing Chinese Cotoneasters. Their value for this purpose can be seen on the southern slope of Bussey Hill where dwarf Cotoneasters have been planted before the large growing species. There are a few broad-leaved Evergreens which can be successfully used here to form an edging to beds of larger Evergreens. The best of them is probably *Andromeda floribunda* from the southern Appalachian Mountains, one of the hardiest and handsomest of the broad-leaved Evergreen plants which can be grown in this climate. It makes a good edging, and with abundant space a wide, symmetrical specimen.

Two low hybrid Rhododendrons, *R. myrtifolium* and *R. arbutifolium* (*R. Wilsonii* of many gardens) are useful to plant on the margins of groups of taller growing kinds, and *R. carolinianum*, although it blooms earlier than most Rhododendrons which are hardy in this climate, might be used for the same purpose. — *Arnold Arboretum Bulletin*.

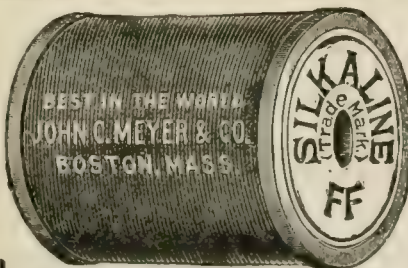
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FLORIST SPECIALTIES
New Brand New Style
'RIVERTON' HOSE

Furnished lengths up to 400 ft. without seam or joint.

The HOSE for the FLORIST
1/2 inch, per ft., 19 c.
Reel of 500 ft., 18 1/2 c.
3/4 inch, 1000 ft., 18 c.
1/2 inch, 16 c.
Reels, 500 ft., 15 1/2 c.
Couplings furnished without charge

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Boston Co-operative Flower Market

260 DEVONSHIRE STREET

BOSTON, MASS.

Notes and Comments

GARDENERS' & FLORISTS' CLUB OF BOSTON.

There was a largely attended meeting of the Gardeners' & Florists' Club of Boston Tuesday evening at Horticultural Hall. Nominations were made and resulted as follows:

President, Herman Bartsch; vice-president, W. H. Judd; secretary, W. N. Craig; treasurer, S. J. Goddard; executive committee, P. W. Burke, Andrew Christensen, Geo. W. Hamer, W. H. Golby, A. K. Rogers, J. P. A. Guerneau, Geo. W. Butterworth, John L. Russell, John R. Ness, Donald Sutherland and Harold A. Ryan. The election will be held at the December meeting, the only contest being for members of the executive Committee.

After the business of the meeting had been transacted Mr. George I'Anson, head orchid grower for A. C. Burrage at Beverly Farms gave a lecture on orchids illustrated by many rare slides. Mr. I'Anson also exhibited a large number of remarkable photographs. Without doubt he has the finest collection of orchid pictures in America if not in the world.

The display of flowers and plants was excellent, and included several remarkable begonias. Among them Optima and Melior contributed by Peter Arnott. Janiten & Kunam sent in one of the finest Cleveland Cherries ever seen in the hall. Samuel Goddard had a new late pompon chrysanthemum Sunshine which is one of the best of the class. Few yellows look so well by artificial light.

BOSTON.

Louis Dupuy of Whitestone, Long Island, one of New York's crack-erjack plant growers, was a caller in Boston this week and visited various plant growers, being particularly impressed with the high quality of stock grown around Waltham and Waverly. It is reported that he bought heavily from these growers for shipment to New York.

On the occasion of Billy Bartlett's 62nd birthday, the boys in the market surprised him with gifts, of many kinds, including a cap, sweater, ties, gloves, a pipe and a supply of tobacco.

E. E. Buxton of Nashua, N. H., was among visitors to the market last week.

E. E. Cummings of Woburn is no longer sending in any violets, having changed over to chrysanthemums, sweet peas and vegetables.

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

B. A. SNYDER CO. *Wholesale Florists . .*

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The House for Quality and Service

ZECH & MANN

We are Wholesale Florists Doing a Strictly Wholesale Business

30 East Randolph Street, CHICAGO

Mr. Libby of Strout's, Biddeford, Me., has been making a three-day visit to Boston.

Mr. S. Pederson and his son of Portland have been visiting in Boston and have done considerable buying.

NEW ENGLAND.

Frank Josifo, the florist of Madison, Conn., is building an addition to his home.

J. J. McManmon of Lowell, Mass., is back from an extended tour of Great Britain and Ireland. While across the water he visited many important estates. He says that there is a great lack of help and that much work in greenhouses and on florists' plants is being done by women.

Robt. E. Edgar has become president of the Leominster, Mass., Floral Co., which has 30,000 feet of glass and expects to ship to Worcester and Fitch-

burg. Mr. Edgar was formerly located at Waverly, and has a fine reputation as a plantsman.

NEW YORK.

Arthur Cowee, the well known gladiolus grower of Berlin has been elected a member of the state assembly. Mr. Cowee is an active Republican and stands high in Rensselaer county.

The retail florists of Buffalo have voted to continue the plan of Sunday closing.

A greenhouse 28 x 200 which is being built for A. L. Miller at Jamaica by Lord & Burnham will be used for Christmas stock.

It is understood that the new white chrysanthemum Mrs. C. W. Johnson, produced by the Mt. Greenwood Cemetery Association of Chicago, is to be disseminated by the C. H. Totty Co., of Madison, N. J.

THE BOILER OF Unequalled Fuel Economy

Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
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No Masonry—No Tubes



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OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

MINNESOTA STATE FLORISTS.

The November meeting of the Minnesota State Florists' Association was held at the Minneapolis Park Board Greenhouses November 11. About 25 florists were in attendance, including Mr. C. D. Kinsman of Austin.

After viewing the chrysanthemum show a regular business meeting of the organization was held. Reports of the summer meeting of the Society of American Florists were given by Hans Rosacker and Le Roy Cady. Interesting accounts of the Buffalo meeting of the Society of American Florists were given by Mr. O. J. Olson and Mr. Calvin Kinsman.

Several matters of business were discussed, among them the improvement of the State Fair premium list. A committee was appointed to work out a better list.

A resolution was introduced and unanimously passed by the Association discouraging the use of billboards by Minnesota florists for advertising purposes. It seemed to be the

A Prominent Carnation Grower Says This About the Standard Recording Thermometer



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\$35.00

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LESTER STREET BOSTON, MASS.

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Standard Thermometer Co., Boston, Mass.

Gentlemen: Please send me 25 record plates like the enclosed sample, and I want to say that the machine, bought a good many years back, is keeping up its good work right along. I think it a very useful adjunct to good plant growing, and it should be in every greenhouse, as reference to it may often tell what is wrong with a batch of plants.

Very truly yours,
ALBERT M. HERR.

The actuating element of the Standard Recording Thermometer is of lamina metal, which, besides being extremely sensitive to temperature changes, is practically indestructible. Record charts are furnished either daily or weekly, and the whole mechanism is contained in an attractive metal case fitted with lock and key, which insures the record from being tampered with.

The clock movement is of extremely high grade; everything about the instrument is up to the highest possible standard of manufacture.

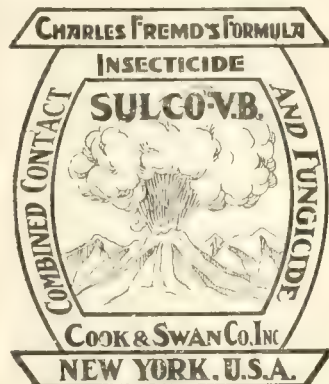
unanimous opinion of the members that the billboard was an unnecessary evil and that the florists in advocating the use of this billboard were taking a step backward.

A very splendid showing of chrysanthemums is being made by the Minneapolis Park Board. This is attracting large numbers of visitors during the day and evening.

WHOLESALE FLOWER MARKETS—Trade Prices Per 100—To Dealers Only

	BOSTON Nov. 17	NEW YORK Nov. 17	PHILA. Nov. 17	CINC'I. Nov. 17	CHICAGO Nov. 17	PITTSBURG Nov. 17	BUFFALO Nov. 17
Roses							
Am. Beauty.....	6.00 to 60.00	3.00 to 50.00	20.00 to 60.00	10.00 to 50.00	12.00 to 50.00	8.00 to 50.00	5.00 to 60.00
Hadley.....	4.00 to 20.00	3.00 to 25.00	8.00 to 15.00	8.00 to 21.00	4.00 to 15.00	..... to	8.00 to 10.00
Hoosier Beauty	4.00 to 20.00	3.00 to 8.00	4.00 to 12.00	5.00 to 15.00	4.00 to 15.00	..... to .....	..... to
Killarney.....	4.00 to 20.00	2.00 to 6.00	4.00 to 8.00	5.00 to 12.00	4.00 to 12.00	4.00 to 12.00	..... to
White Killarney	4.00 to 20.00	2.00 to 6.00	4.00 to 8.00	5.00 to 12.00	4.00 to 12.00	4.00 to 12.00	..... to
Mrs. Aaron Ward	4.00 to 20.00	3.00 to 8.00	4.00 to 6.00	5.00 to 10.00	4.00 to 12.00	4.00 to 12.00	..... to
Mrs. Chas. Russell.....	4.00 to 20.00	3.00 to 8.00	4.00 to 6.00	5.00 to 10.00	4.00 to 12.00	4.00 to 12.00	..... to
Mr. Geo. Sawyer.....	4.00 to 20.00	3.00 to 8.00	4.00 to 6.00	5.00 to 10.00	4.00 to 12.00	4.00 to 12.00	..... to
Columbia.....	4.00 to 20.00	3.00 to 8.00	4.00 to 6.00	5.00 to 10.00	4.00 to 12.00	4.00 to 12.00	..... to
Maryland.....	4.00 to 20.00	3.00 to 8.00	4.00 to 6.00	5.00 to 10.00	4.00 to 12.00	4.00 to 12.00	..... to
Ophelia.....	4.00 to 20.00	3.00 to 8.00	4.00 to 6.00	5.00 to 10.00	4.00 to 12.00	4.00 to 12.00	..... to
Adiantum.....	.75 to 1.00	.75 to 1.00	1.00 to 1.50	1.00 to 1.50	1.00 to 1.50	1.00 to 1.50	..... to
Asparagus plum (100 bchs apren).....	.25 to .50	.15 to .25	..... to	25.00 to 50.00	5.00 to 15.00	40.00 to 50.00	..... to
Pom Pons.....	.25 to 1.25	..... to .....	..... to	25.00 to 50.00	25.00 to 50.00	60.00 to 75.00	..... to
Bonaffon.....	1.00 to 5.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Calendulas.....	1.50 to 5.00	5.00 to 15.00	3.00 to 15.00	3.00 to 15.00	2.00 to 6.00	4.00 to 6.00	..... to
Carnations.....	3.00 to 5.00	1.00 to 3.00	3.00 to 6.00	4.00 to 8.00	3.00 to 5.00	3.00 to 4.00	..... to
Chrysanthemums.....	.50 to 3.00	4.00 to 35.00	10.00 to 30.00	10.00 to 50.00	15.00 to 35.00	8.00 to 50.00	8.00 to 40.00
Calla.....	2.00 to 4.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Ferns, Hardy.....	1.50 to 2.00	..... to	20.00 to 25.00	30.00 to 35.00	15.00 to 20.00	..... to .....	..... to
Galax leaves.....	..... to 2.00	15.00 to 20.00	15.00 to 20.00	15.00 to 20.00	15.00 to 20.00	..... to .....	..... to
Marguerite.....	.75 to 3.00	..... to .....	..... to .....	..... to	15.00 to 20.00	..... to .....	..... to
Narcissus.....	2.00 to 4.00	.50 to 1.50	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Orchids Cattleyas.....	75.00 to 125.00	..... to	150.00 to 200.00	..... to .....	..... to	75.00 to 100.00	..... to
Orchids Cypripediums.....	..... to .75	..... to .....	..... to	15.00 to 20.00	20.00 to 25.00	..... to .....	..... to
Sweet Peas.....	1.50 to 4.00	1.00 to 1.50	1.00 to 3.00	1.50 to 2.00	2.00 to 3.00	..... to	1.00 to 2.00
Snap Dragon.....	.50 to 2.00	.50 to 1.00	5.00 to 10.00	6.00 to 8.00	..... to .....	.50 to .75	4.00 to 6.00
Violets.....	1.25 to 2.00	.25 to .75	.50 to 1.00	.50 to 1.50	.50 to .75	.75 to 1.00	.75 to 1.00

IN LINE FOR FALL SPRAYING IN NEW ENGLAND



SAN JOSE SCALE
OYSTER SHELL SCALE
BAY TREE AND PALM SCALE
SCURFY BARK LOUSE
PEAR PSYLLA
CLUSTERS OF APHIS EGGS
HANG OVER FUNGUS SPORES OF THE
BROWN ROT OF THE PEACH AND
OTHER STONE FRUITS.
PEACH LEAF CURL
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Destroy the above named insects and fungus spores by spraying them with

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A combined contact insecticide and fungicide of known reliability

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Geo. H. Frazier, Mgr.

RHODE ISLAND HORTICULTURAL SOCIETY

The November Exhibition of the Rhode Island Horticultural Society, held Nov. 13th and 14th, proved to be one of the most successful exhibits ever held by the Society.

The co-operation of the Providence County Farm Bureau, Providence Farmers' Exchange and the Providence Market Gardeners' Association, contributed a great deal to the success of the exhibition.

In the class for the best five boxes of vegetables, E. L. Lewis, Taunton, won first, Providence Market Association won second, and D. N. Potter, Inc., third.

Best three boxes vegetables, first prize won by E. L. Lewis; second, by H. Vinton Potter; third, by J. W. Peck Co.

For the best exhibit in space 5' x 8', first prize won by Fred S. Peck, Barrington (Gardener John Doig); second, Providence County Farm Bureau; third, Fannie C. Bowen.

In the horticultural classes, the Maplehurst Greenhouses, Longmeadow, were winners in several chrysanthemum classes; also won many prizes for carnations and snapdragons.

John Macrae, florist, Providence, also won many prizes, especially in carnation classes.

Fred S. Peck (Gardener John Doig), carried off numerous prizes for chrysanthemums, carnations, as did Fred Hoffman, Pawtucket. In the floral art classes, T. J. Johnson Co., Providence, carried off many of the prizes.

In the fruit classes, L. G. K. Clarner, Cumberland, was a frequent winner. Frederick Jencks, Barrington; Jesse Carpenter, Abbotts Run; N. L. Vaughn, Greenville; W. Steele, Providence. G. J. Schorhardt, Providence, were also winners in several classes.

In the ornamental groups of foliage plants, Fred S. Davis of Providence, staged some attractive groups.

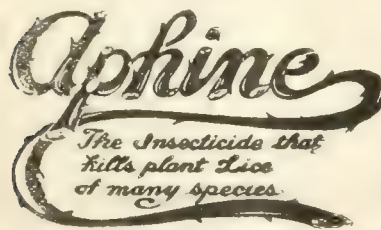
S. C. Damon of the Rhode Island State College, Experiment Station, exhibited some handsome celery. The exhibit included nearly all of the commercial varieties on the market at the present time.

By ERNEST K. THOMAS, secy.
Rhode Island State College.

COMING EXHIBITIONS.

January 21-22, 1920, Chicago—Annual exhibition of the American Carnation Society. A. F. J. Baur, secretary, 3800 Rockwood avenue, Indianapolis, Ind.

March 15-22, 1920, New York—Flower show of the New York Florists' Club at Grand Central Palace. John Young, secretary, 1170 Broadway, New York.



The Recognized Standard Insecticide.

A spray remedy for green, black, white fly, thrips and soft scale.

Quart, \$1.00; Gallon, \$2.50.

FUNGINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.

Quart, \$1.00; Gallon, \$2.50.

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For eel worms, angle worms and other worms working in the soil.

Quarts, \$1.00; Gallon, \$3.00.

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Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to directions, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

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1/2 Pint, 30c.; Pint, 50c.; Quart, 90c.;

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HORTICULTURE

Vol. XXX

NOVEMBER 29, 1919

No. 22

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

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In two grades, short sprays, small foliage (the bush variety) per 100 lbs. \$30.00.

Longer sprays and larger foliage (the tree variety) per 100 lbs. \$25.00

Both grades splendid quality, no surplus wood. Packed in bags of about 50 pounds each.

Deliveries now for those who want to start their Christmas work.

Golden Retinispora, Rhondo Leaves, Mexican and English Ivy, and a full line of other desirable and attractive Christmas greens in our special Christmas Greens list. Write for same if it has not reached you.

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This fern was

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at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we RECOMMEND IT MOST HIGHLY."

Strong plants, 2½-inch pots.....\$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots..... 7.50 per dozen, 50.00 per 100
Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:		Each
Elegantissima, elegantissima compacta, and Muscosa, 3½-inch		\$0.35
Elegantissima and elegantissima compacta, 6-inch		.75
Muscosa, 5-inch		.75
Elegantissima and elegantissima compacta, 8-inch		2.00
Elegantissima and elegantissima compacta, 10-inch		4.00
Harrisii, 8-inch		3.00
Dwarf, Boston, 8-inch		2.00

If plants are shipped in pots, 10% additional.

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FERNS

We have an excellent lot of pot grown Boston and Scottii Ferns ready for an immediate shipment before cold weather sets in. The following price will hold good during November. Shipped without pots.

Size	Doz.	100	1000
3 inch.....	\$1.00	\$ 8.00	\$ 75.00
4 inch.....	3.00	20.00	190.00
5 inch.....	4.50	35.00	325.00
8 inch, \$1.50 each.			

ALTERNANTHERAS, Alyssum, Double Giant and Dwarf, Begonias Gracilis and Vernon mixed colors, Coleus Standard sorts, Hardy English Ivy, Lantanas, assorted, Heilotrope, Lobelia, Crystal Palace Gem, Moonvines, 2-in. \$2.75 per 100.

Send for Catalogue Cash With Orders

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Write for Prices.

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Nephrolepis Norwood Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.
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S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN.

It is pleasing to note from the list of new subscribers this week that our Canadian friends in the trade are appreciating the work of our Publicity Campaign. The legion of florists in our own United States who have not yet subscribed to the Fund should, to use a slang expression, sit up and take notice—then sit down and write their cheques for the contributions which, surely, they intend to make. There is no room for doubt as to the beneficial effect of our Campaign. A year or more ago some might have been of the opinion that a shortage in production of flowers, through lack of fuel and war conditions, was the cause for a general clean-up of market stock at inflated prices. Such conditions have long since passed, but to-day we find the markets cleaning up as never before, in spite of increased values. Why? Simply this, the public are buying more flowers. Flowers are going regularly into homes where before their use was only occasional. Anniversaries are being more generally remembered with the "Say it With Flowers" spirit. The sick are being cheered with bright flowers continually, and the sending of flowers to hospitals is now practiced on a much larger scale.

Our committee is now urgently in need of further funds. In the interests of our industry more money should be forthcoming, and we now appeal to all those neglectful members of our craft to come forward with their support, and help us to nail down the success we have met and to carry it along indefinitely. We are a long, long way from our goal of \$100,000, but with the co-operation that we have a right to expect its accomplishment should be easy.

Think the matter over—and act. Opportunities never linger, let us grasp the one we have sought and can, with the proper support, retain.

"Say it With Flowers"
In the Theatres.

The Von Tilzer song, "Say it With Flowers," has proved to be a "hit" at the theatres where it has been presented. In New York last week, at the Palace, crowded houses greeted it, and it became quite a feature as ren-

NAMED HYACINTHS Top Bulbs BEDDING HYACINTHS

First Size, Separate Colors

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The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden

Brnx Park NEW YORK CITY

dered by Miss Grace Larkue. The setting of the song was helped by local florists, who supplied flowers and gave other assistance. In Cleveland where Miss Frances Kennedy exploited the song, about 200 florists attended the theatre on the first evening, and they supplied about 1,500 corsage bouquets for the ladies in the audience as souvenirs, and, besides, used banners on their delivery wagons, and special window trims. Chicago is also prepared to give the song presentation every support. In the weeks of December 7th, 14th and 22nd, Louisville, Ky., Cincinnati and Salt Lake City, will be among the prominent cities to have the song featured. Altogether, a corps of one hundred or more vocalists will shortly be featuring the song every week, and florists in every city are urged to lend every assistance they can in the presentations. It is good publicity, at no expense to our Campaign.

Billboards.

A number of billboards have been ordered, for shipment to various parts of the country. Guile Bros. Co., of Washington, have ordered no less than three for their own locations. The cost, \$50 each, delivered at any railroad station, is not much, and the country should be fairly sprinkled with signs in a short time. Look over your opportunities for a display of one of these signs and get your order in—the quicker the better.

New Subscriptions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

Mary C. Richs, Philadelphia, Pa.....	\$5.00
Carl A. Lange, Philadelphia, Pa.....	10.00
Joseph Bancroft & Son, Cedar Falls, Ia.....	20.00
Downing, Stein Co., Kitchener, Ont....	5.00
Hall & Robinson, Montreal, Que.....	25.00
Mrs. F. Waters, Toronto, Ont.....	10.00

One Year

J. B. Wiese, Buffalo, N. Y.	\$25.00
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Toronto Floral Co., Toronto, Can....	15.00
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George R. Clark, Scranton, Pa.....	5.00
Goodhue Floral Co., Ann Arbor, Mich.	10.00
Fairhope Greenhouses, Louisville, O.	10.00
Dora Brown, Goshen, Ind.....	5.00
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Eddy Bros., Montreal, Que.....	25.00
E. J. Haywood, Montreal, Que.....	10.00
R. H. Wright, Ottawa, Ont.....	10.00
Hav Flower & Seed Co., Brockville, Ont.	5.00
T. Manton, Toronto, Ont.....	10.00
J. J. Higgins, Toronto, Ont.....	25.00
J. Gammage & Sons, London, Ont....	50.00
Tidy & Son, Toronto, Ont.....	25.00
Miller Bros., Toronto, Ont.....	35.00
McKenna, Ltd., Montreal, Que.....	50.00
Carter Bros., Barrie, Ont.....	10.00
Arcade Flower Co., Toronto, Ont....	50.00
H. Waters, Toronto, Ont.....	10.00
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FOR IMMEDIATE DELIVERY

HYACINTHS, Single Size 17 to 19 c m NAMED VARIETIES Quan. per case 100 1000			SINGLE EARLY TULIPS	
Grand Maitre, porcelain blue	1600	\$7.50	Gold Finch, pure yellow	22.00
Perle Brillante Improved Grand Maitre, 1800	7.50	60.00	Rose Grisdelin, delicate pink....	22.00
TULIPS			Vermilion Brilliant.....	35.00
DOUBLE EARLY TULIPS			Prince of Austria, orange scarlet.	38.00
Couronne D'Or, orange yellow... 1000	\$32.00		NARCISSUS	
Tournesol, red and yellow..... 34.00			GUERNSEY STOCK	
			Blooms earlier than Holland Bulbs	
			Narcissus, Emperor, large size... 1000	\$30.00
			YELLOW CALLAS	
			Godfrey Calla Roots, 2 1/2 to 3 inch circ.	100 \$20.00

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THE NEW HYBRID
HARDY PRIVET
(L. Ibota x Ovalfolium)



Natural Habit



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Now sent out for the first time. Inquire for further information. One year field grown plants, \$5.00 each; Summer rooted, frame grown, \$3.00 each; Nov. 25th Delivery. The Elm City Nursery Co., WOODMONT NURSERIES, INC., New Haven, Conn. Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.

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With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for future delivery.

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T. A. Ivey & Son, Port Dover, Ont....	25.00
M. O'Field & Son, Grimsby, Ont.....	10.00
J. Bobbington, Sr., Fredericton, N. B.	5.00
Dale Estate, Brampton, Ont.....	50.00
Philip, Auston, Arkona, Ont.....	5.00
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Denison Greenhouses, Denison, Tex.	\$5.00
Downing, Stein Co., Kitchener, Ont.	10.00
Cannon Floral Co., Hamilton, Ont....	10.00

Donated	
L. B. Coddington, Murray Hill, N. J.	\$20.38
Previously reported.....	\$776.38
Total	\$51,347.88
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Nov. 22 1919.	

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Extra heavy ADIANTUM HYBRIDUM, 6-in., \$75.00 per 100.

Extra good CHATELAINE BEGONIA, 2½-in., \$7.00 per 100, \$65.00 per 1000. 3-in., \$12.00 per 100.

BIRD'S NEST FERN. Excellent stock, 2½-in., \$18.00 per 100; 3-in., \$27.50 per 100.

CARNATION CUTTINGS

Booking orders for December 15, and later. We are well prepared to supply in quantity and our growers have a high reputation for the quality of cuttings produced for years past. Have made special arrangements to supply LADDIE, MORNING GLOW and PINK DELIGHT from clean stock plants grown only for propagation purposes.

NEW AND SCARCE CARNATIONS

	100	1000
ETHEL FISHER (Peter Fisher) scarlet.....	\$14.00	\$115.00
BERNICE (Howard) crimson.....	14.00	115.00
RUTH BAUR.....	12.00	100.00
LADDIE.....	10.00	90.00
MORNING GLOW.....	7.00	65.00
WHITE BENORA.....	7.00	65.00
PINK DELIGHT.....	7.00	60.00
HERALD.....	7.00	60.00
ROSALIA.....	7.00	60.00

Aviator, Belle Washburn, Doris, Benora, Rosette, Enchantress Supreme, White Enchantress, Beacon, Ward, Good Cheer, White Perfection, White Wonder, Miss Theo—\$6.00 per 100; \$50.00 per 1000. Matchless, Nancy, Alice and Enchantress—\$5.00 per 100; \$40.00 per 1000.

FERNS for fern dishes. As- 100 1000
sortiment of best sorts,
2½-in. \$6.00 \$55.00
3-in. 12.00

KENTIA Belmoreana. Strong Doz. 100
2½-in. \$1.50 \$12.00
3-in., \$25.00 per 100. 4-in., 50c. each

IVY, English. 3-in., \$8.00 per 100.

CINERARIA

Selected strain, 2½-in., \$7.00 per 100; \$65.00 per 1000.

WINTER FLOWERING FORGET-ME-NOT. Best Boston Market Forcing Strain. \$7.00 per 100, \$65.00 per 1000.

SNAPDRAGON. Ready now. Nelrose, Silver Pink, Enchantress, Keystone, Phelps White and Yellow, 2½-in., \$6.00 per 100, \$55.00 per 1000.

BEGONIA MRS. M. A. PATTEN. Dark sport of Chatelaine. Buy now and have them ready for Xmas. 2½-in., \$10.00 per 100.

Crotons

Nice 2½-in. plants. Get your stock now and be ready for your mixed pans and hampers for the holidays. A good assortment of highly colored sorts both broad and narrow leaf types. \$35.00 per 100.

Let us quote you on Ramblers and Baby Ramblers. One year old plants, excellent for growing on. We have the best sorts and in quantity.

10,000 Hydrangeas. Otaksa and best French sorts. 3-inch, \$12 per 100; 6-inch, heavy, \$40 per 100; 7,000 2½-inch at \$7 per 100, \$65 per 1,000.

Pelargonium Easter Greeting, also mixed, including four best sorts, 2½-inch, \$12 per 100. 500 White Baby Rambler Catherine Ziemet, forcing stock, immediate shipment, \$30 per 100.

Cash or satisfactory trade references. No C. O. D. Shipments.

L. J. REUTER CO. Plant Brokers

15 Cedar St., Watertown, P. O.
BOSTON, MASS.



BEGONIA. A good offer in Melior and Cincinnati. Strong, bushy plants from leaf cuttings. 3½-in. ready to repot in to 5-in. at 50c. each. 2½-in. from top cuttings, strong plants, 25c. each.

CYCLAMEN. Blood red, salmon, crimson, white carmine eye, 4-in. ready for 5-in., 50c. Blg. fancy plants in 5-in. pots at \$1.35 each.



SIM'S YELLOW POLYANTHUS

THE BEST ON THE MARKET

Winter flowering clumps ready now.
\$8.00 per 100 - - - \$75 per 1000

Asparagus Plumosus Seed

Massachusetts greenhouse grown, 1000 \$3.00; 5000 \$13.50.

GYPSOPHILA SEED

(Nicholson's Forcing Strain)

Earliest and Best
¼ oz., 50c.; ½ oz., 85c.; 1 oz., \$1.50

TWO NEW FERNS

NEPHROLEPIS MACAWII

A Winner

2½ in., \$20 per 100.

THE VICTORY FERN

(Nephrolepis Victoria)

Bronze Medal at Detroit.

	Per Doz.	Per 100
2½ in. pots.....	\$3.00	\$20.00
3½ in. pots.....	7.50	20.00

OTAHEITE ORANGES, for growing on, 2½-in., \$20.00 per 100.

LATANIA Borbonica, Fan Leaf Palm, 3-in., \$30.00 per 100.

ARECA Lutescens, 2½-in., single plants, \$15.00 per 100; 2½-in., made up three plants to the pot, \$20.00 per 100.

ASPARAGUS Plumosus, seed-	100	1000
lugs		\$8.00
2½-in.	\$5.00	45.00
3 in.	10.00	
Sprengeri Seedlings.....		7.00
Sprengeri, 2½-in.	5.00	45.00
3-in.	10.00	

CHRISTMAS JOY PEPPER. Heavy, 4½-in. pots, \$30.00 per 100. Well set with Berries and colored. A Bargain.

Dracaenas

Godseffiana, Sanderiana, Lord Wolsley, Kellieriana and Terminalis. They are highly colored and just right for mixed pans and hampers for the holidays. You will save money by getting them now. Strong, 2½-in. pot plants, \$25.00 per 100; 3-in., select stock, \$40.00 per 100.

Gladiolus Bulbs

America, Augusta, Halley, Mrs. Francis King, \$35.00 per 100.

Brenchleyensis, Fire King, \$30.00 per 1000.

Mrs. Watt, Chicago White, Peace, \$45.00 per 1000.

Baron Hulot, \$60.00 per 1000.

Mrs. Frank Pendleton, Niagara, \$50.00 per 1000.

Panama, \$60.00 per 1000.

Schwaben, \$70.00 per 1000.

FOR PROFIT BUY PRIMULINUS HYBRIDS. WE HAVE THEM IN QUANTITY AND OF BEST SELECTION. Don't forget Primulinus Hybrids average two to three blooms per bulb and are quick sellers in the market. Fancy, \$35.00 per 1000. Regular, \$20.00 per 1000.

All varieties quoted are first size. For second size \$5.00 per 1000 less.

HORTICULTURE

Vol. XXX

NOVEMBER 29, 1919

No. 22

THE TALK OF THE TRADE

A short time ago I spoke in this column about Begonia Optima. Possibly some of you growers thought that I was raving, but any who had the pleasure of seeing Optima at the Boston Gardeners' and Florists' Club at its last meeting must have felt like taking their hats off to that plant. This variety is a wonder as I am sure all who saw it will agree. Again I mention a few strong points. First of all, it is a keeper that is unbeatable. The blooms simply will not shake off; they will dry up on the plant without dropping. The color is better than that of Lorraine or any of that type, the salmon shade giving great life. Moreover, individual blooms are several times larger and carried in loose clusters very prettily arranged. It is a heavy grower and makes a well-formed plant. Mr Bartsch of the W. W. Edgar Co., of Waverly, one of the places where Optima is being tried out commercially, is enthusiastic about it and passes this word on to his fellow plantmen. "Boys, keep your eye on it."

Butler & Ullman, of Northampton, have one of the prettiest flower stores in New England. Perhaps the enterprising proprietors, both of whom are energetic young men, feel that the close proximity of Smith College makes it necessary for them to go a little farther than the average florist in making their place of business attractive to the eye. A handsome new delivery wagon which conforms in quiet elegance to the appearance of the store has just been put into service.

I was interested in reading one of the advertising cards prepared by this firm. It is printed in large display type and was worded as follows:

"Surprise her with a bunch of chrysanthemums—the flower that lasts long after the giving. Women cherish such little attentions."

The firm has done an exceedingly large business in chrysanthemums this season and have been particularly successful with the yellow varieties developed by John Sinclair of Smith's Ferry. Butler & Ullman have a large range of greenhouses which furnish much of their stock, although they buy most of their roses at Montgom-

ery's place in Hadley, which is but a short distance away.

Although the Montgomeries seem to be a long way from the main artery of travel, a great many people reach their greenhouses every season, and of course much interest is being shown just now at least by visitors who are in the trade in the splendid new roses, Crusader and Pilgrim, which were originated here. Perhaps it isn't strange after all that visitors should be numerous, though, for this section of Massachusetts is one of the prettiest in New England, a fact which is being realized by people who are seeking for summer homes. Alexander Montgomery told me that he usually made his trips to Natick by a cross-road from Hadley to Ware. Accordingly I tried the same route on the way home, and while it was exceedingly picturesque and not a difficult road to negotiate in the summer, I can imagine that anybody who tried to cover it in a machine in the spring would be likely to become mired somewhere in a wilderness where public garages are few and far between. I am glad I took the road, however, for seldom have I seen such fine displays of black alder (*Ilex verticillata*) as were encountered along the way, but as this fruit has been so plentiful everywhere I am not surprised that it has been displayed lavishly in the windows of florists.

One of the fortunate growers for the Thanksgiving trade this season was Frank Edgar of Waverley. He had a house of Chrysanthemums in the pink of condition. A large block of Bonnafons were just right. It wasn't necessary to cut ahead of his Thanksgiving orders and when you can go into a house and clean off the entire crop for one special day, you are doing 'mums in good shape. His Bonnafons were not fancy but of a good commercial grade, just the size the storemen wanted. So many of the growers were too early with Bonnafon, but those who had them for Thanksgiving sold them at a good price. Whenever you think of Frank Edgar you think of pot plants and it is worth a trip from a distance to see his plant stock, particularly the Cyclamen. We don't know if Cyclamens have ever been

done better in quantity than this lot. His Begonias are also in excellent shape and he has a lot of pot-grown Ferns which will be of value to anyone in the store trade as they will stand up better than the drawn up and softer bench-grown stock.

J. K. Chandler & Sons of Tewksbury had as large a quantity of Poinsettias as anyone around New England and they were very well grown. The varieties they grow seem on the whole the most popular, they limiting themselves to a few of the best, among which we might mention the little yellow button Baby, Mrs. Beu, Julia, La Gravera, Diana, Golden West and Western Beauty. They had this stock in great quantity for the Thanksgiving trade and realized good returns.

The situation as regards Geranium stock for the coming year looks mighty serious. The high prices of last spring must have induced most of the growers to sell out further than they should. It would seem that no one has stock plants enough from which to get their requirements for the next season. Another serious difficulty was the unseasonable weather during the fall, which caused an unusual loss in cuttings. The continued rainy and cloudy weather filled the field plants full of water and when the cuttings were taken they were so soft that it was almost impossible to get a decent strike. Anyone having Geranium stock to offer from now into the spring will have no difficulty in disposing of it and at good prices.

What are the probabilities for a supply of pot plants for Easter? At the present writing it would seem that Ramblers, both the polyantha and the tall growing, will not be in over supply. No great amount of stock has been offered. Of course we will not have Azaleas. There should be plenty of small plants such as Primula, Calceolaria, Cineraria; Hydrangeas, both Otaksa and the French varieties are plentiful. Of course we are all pleased that we will have a good supply of Lilies, so taking it all in all these plants mentioned, with a few other lines which may be picked up here and there, we have a right to look for a nice supply of stock.

DISPATCHING ORDERS BY WIRE.

As the holiday season approaches and telegraph orders are more numerous than at any other time, I feel that a message of warning at this time, of the necessity to be extremely cautious in avoiding any errors in taking orders for out-of-town delivery is opportune. Be absolutely sure to get the full details as to correct name, address, card, etc. If possible urge your customers to place their orders early, so that they can be transmitted by mail; this you will find to be more satisfactory as the retailer receiving such an order can make provision for same and avoid substitution in many cases.

I would like to call your attention to the importance of having the card attached to the order, be very explicit in every detail, many a gift has not received the proper acknowledgement, owing to the fact that the card did not state what city the gift was from. Just such an instance happened only recently. An order was received by wire to deliver a box of roses to a Mrs. Johnson, 1565 25th St. Card, Mrs. A. F. Davis (no city mentioned). The florist who wired the order made a complaint that the order was not filled, the party who had placed the order had heard from their friend in the distant city that they had not received any flowers from their city, so a complaint was lodged with the retailer who had wired the order. The retailer who had filled the order satisfactory to his own judgment was nonplussed at receiving this complaint. It so happened in the course of a few days that a member of the family came into the store, the florist at once looked up the original order and asked if they had received the gift of flowers on that particular day. They admitted the flowers were received and that the card of Mrs. Davis was enclosed, but as they had acquaintances of the same name in their home city, took it for granted that the gift was from them, after due explanation, the acknowledgement was forwarded with the necessary apology.

An order placed in Chicago for a box of roses to be delivered in Detroit with a card, should read "From Mrs. A. F. Davis, Chicago, Ill." instead of just from "Mrs. A. F. Davis" and not mention the city.

The point in question is self-explanatory and it behooves every member to see that every out-of-town order receives the strictest attention. By so doing we can avoid unpleasant conditions.

Yours for more F. T. D. A. co-operation,

ALBERT POCHELON,

Secy. F. T. D. A.

DRIVES COMMERCE AWAY

Federal Horticultural Board's Peculiar Ruling as to Imports Billed to Canada

The Federal Horticultural Board continues to draw the lines tight and still tighter. Now it has taken a step which will tend to drive away commerce from United States ports and send it to Canadian ports. The following letters tell the story:

New York, Nov. 13, 1919.

Federal Horticultural Board,
Washington, D. C.

Gentlemen:—By request of several of our Canadian customers we have received prices from them upon Holland Nursery Stock, consisting for the most part of Azalea Mollis, Rhododendrons, Magnolias, Boxwood, Roses, etc., which Canadian laws do not prevent Canadian florists from importing to stimulate their own commerce, as our U. S. laws do.

These Nursery Stock items are mostly balled, i. e., with earth about the roots; and according to one of your recent letters, you advised that such stock cannot come through U. S. entry ports when earth is about the roots, even though they are bonded through to Canadian ports.

You will see how your regulations work to the disadvantage of American trade, and will mean that such shipments will have to be forwarded via English and Canadian ports, thus driving commerce away from American ports. It will also be a disadvantage to the Canadian importers, as they will get slower service at an increased price.

Before issuing our quotations we suggest, as patriotic Americans, that you reconsider the matter. As these shipments are not unpacked in the U. S. there is not the slightest danger of introducing insect pests or plant diseases in the U. S. through them, and we do not think it is your intention to drive commerce away from the U. S. without adequate reasons.

In quoting to Canadian firms we must either say that the shipments can come in bond through New York ports as usual, or that we can book orders only when the importer makes arrangements for shipments to come via English and Canadian ports, so we trust you will give proper consideration to the matter and advise us your final decision as soon as possible. We are receiving almost daily requests from Chamber of Commerce and other commercial bodies to boost foreign trade, but so far as our business is concerned your regulations block any efforts we could make.

(Signed) McHUTCHISON & Co.

Washington, D. C., Nov. 17, 1919.

McHutchison & Co.,
95 Chambers St.,
New York, N. Y.

Gentlemen:—In reply to your letter of November 13th, I would say that although our regulations prohibiting the importation into the United States of plants with sand, soil and earth on their roots even for transmission in bond do work some disadvantage to American brokers; they are designed to act to a far greater advantage to the growers of plants in the United States. One of the most important sources of foreign insects which have come into the United States and have attacked our nursery crops, farm crops and wild and ornamental trees has been the balls of earth about the roots of imported plants. Many insects spend their lives buried in the soil and emerge from this soil to attack our plants. Even though the soil is tied up in sacks and packed in boxes these insects may emerge and fly away from a package, thus gaining entry into this country. It is, therefore, one of the very necessary safeguards of this immediate transportation in bond that the plants shall not have sand, soil or earth on their roots, and that bulbs shall not be packed in sand, soil or earth, except such sterilized soil as is provided for in Amendment 1 to Regulations Supplemental to Notice of Quarantine 37, a copy of which I enclose.

Very truly yours,

(Signed) R. KENT BEATTIE,
Pathologist in Charge,
Foreign Plant Quarantines.

PHILADELPHIA.

The crop of American Beauty has been on the short side for some little time and most of the flowers now arriving are specials. For Thanksgiving these found a ready market in the nine ten column—which compares very favorably with this time a year ago. Russells are a little off crop but Columbias and Premiers are in strong supply and make a fine showing. Double white Killarney is also very good; and Ophelia is in good supply and first-class as to quality. First cuts of Jennie Nonin arrived on the 24th and were promptly picked up, some fancies bringing as high as six and seven fifty. Other leaders just now in the 'mum market are Bonnafon and the two Chadwicks. Seidewitz seems to be about the only good among the pinks at present. Cattleyas are scarce. Those arriving are mostly labiata and Percivaliana. The December crop of trianae is expected in about a week.

WITH THE PENNSYLVANIA GROWERS

Starting at 1 p. m. the first order of the day was a trip to Strasburg, stopping first at the houses of Amos Rohrer who grows carnations as a main crop but has snapdragons, sweet peas and calendula as a side issue. Every thing looked well especially the carnations, of which he grows Mrs. C. W. Ward, Matchless and Supreme in quantity and one bench of White Wonder that still continues to give good satisfaction. He also had a bed of Albert Roper which he says is a bit shy through the winter but makes up for lost time in the spring and holds its color remarkably well in the hot months. Mr. Rohrer grows quite an assortment of pot plants for his local trade.

Mr. Chas. B. Herr entertained us for an hour at his place and in addition to the Ward, Supreme, Belle Washburn and his big house of Matchless he has a bed of Crystal White that looks very promising as a commercial sort. To keep himself out of mischief he has some fine fancy pigeons and has trained his pet dog to a hundred or more tricks.

J. Wade Galey, half a mile out has once again the banner houses of carnations for Lancaster County. The other two places were fine but his are superfine. He grows Mrs. Ward, Supreme, Matchless, Beacon and Alice. His cut last season was Mrs. Ward 19, Matchless 23, Beacon and Alice 25 to the plant, not to one or two plants but to every plant on the place, and this season promises just as good or better.

On the way back to Lancaster a stop was made at the place of Carl Brackbill. Here we found the old arch enemy of carnations stem rot super-induced by the plants being under water part of the time just before housing them.

The last place visited was the H. D. Rohrer establishment where the carnations are below par owing to the continued rains and a leaky roof, but the better weather of the past week has helped and most of them will make a crop. Mr. H. K. & A. K. Rohrer, who are now running the place have developed into plant growers as well as cut flower men and have their famous strain of Primula by the 100,000 in various sizes. They also have a house of Cyclamen that measures up to the high standard set for this flower. A fine batch of Paris Daisies in pots completes the plant end, but they have Calendula, Myoso-

William W. Edgar Co.

FLORISTS

WAVERLEY, MASS.

"THE HOUSE OF SERVICE"
Call Belmont 600

SEASONABLE FLOWERING PLANTS

Cyclamen, Begonias, Primulas, Chrysanthemums, Peppers, Jer. Cherries, Paper Whites, etc.

Visitors Always Welcome

THOMAS J. GREY CO.

16 SO. MARKET ST.

BOSTON, MASS.

JUST ARRIVED

LILIUM GIGANTEUM

Will Have Cold Storage Giganteum Later

CANNAS

A large stock of several varieties. PRICES RIGHT. Let us book your order now for shipment at any time.

PARKER BROS. NURSERY CO.

FAYETTEVILLE

ARKANSAS

tis and Calla Lilies as additional cut flower stock.

On the trip we had with us Messrs. Arthur Niessen, Dennis Connor and T. J. Nolan.

The evening meeting was an innovation, the place being the Men's Parlors of the Y. M. C. A. and was preceded by a very fine supper served by the ladies of the Y. M. C. A. under the supervision of Mrs. A. M. Herr, their president.

Cut flowers were on exhibition, a fine display of pompons from President Elmer Weaver, the larger flowered mums from H. K. Rohrer and Lemon Landis and the new white sweet pea Mrs. Rudolph Nagle from Mr. Rudolph Nagle. This pea is making friends with every one who sees it and Mr. Nagle is to be congratulated on having introduced it.

The paper of the evening was by Mr. Arthur Niessen of Philadelphia on the prospects for the coming winter and was listened to with much attention.

Unexpectedly we had with us Mr. W. F. Therkindson and Mr. Prentice of the N. W. Ayer advertising agency and Mr. Therkindson outlined the publicity work of the S. A. F. and for

local clubs in his own inimitable style.

Both Mr. Niessen and Mr. Therkindson answered many questions and the meeting went on record as endorsing the movement of the Philadelphia Club of raising funds by the percentage plan, for publicity purposes.

Mr. T. J. Nolan was presented with a huge birthday cake on which was erected a boiler house and stack and Mrs. A. M. Herr in making the presentation speech said it was up to him to build the greenhouse. He thanked the members for their remembrance and after the meeting adjourned cut the cake and gave each lady and gentleman a slice to either eat or to take home and dream on.

DREER'S

FLORIST SPECIALTIES
New Brand New Style
"RIVERTON" HOSE

Furnished lengths up to 500 ft. without seam or joint.

The HOSE for the FLORIST
1/4-inch, per ft., 10 c.
Reel of 500 ft. " 18 1/4 c.
2 Reels, 1000 ft. " 18 c.
3/4-inch, " 16 c.
Reels, 500 ft. " 15 1/4 c.

Couplings furnished without charge

HENRY A. DREER
714-716 Chestnut St
PHILADELPHIA, PA.



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 One month (4 times), 5 per cent.; three months (13 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.
 Page and half page space, not consecutive, rates on application.

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One Year, in advance, \$1.00; To Foreign Countries, \$2.00; To Canada, \$1.50.

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There would seem to be good reason for the sharp criticism of the Federal Horticultural Board which appears in a signed communication on another page. Apparently this board can see nothing but bugs. Matters of commercial importance are to be lightly waved aside. The idea that plants with wrapped balls of earth shall not be allowed to pass through the United States from an American port to a Canadian consignee is preposterous, and the writer of the letter in question points out that this is rank discrimination against our own seaports in favor of those of another country.

However nurserymen and florists may feel upon the general subject of restricting plant importations—and of course there are arguments on both sides—the trade cannot well help asking, if the Federal Board is to be clothed with such autocratic power and is to be permitted to go to almost any length, what guarantee can our business have as to its future. Surely the trade is justified in demanding that this whole matter be taken up again and thrashed out on a less biased and more scientific basis.

It is human nature no doubt to wish for and expect immediate results from money which is spent for advertising. Certain florists seem to think that business ought to boom as soon as a "Say It with Flowers" week campaign had been started. When there is no rush of patrons as a result of advertising, some of them seem to regret the outlay. The right kind of advertising is cumulative, however. Once an idea has been gotten under way it gathers force and impetus. The results of "Say It with Flowers" week in different cities will be seen for a long time.

It is difficult to explain just how it happened in Boston that the week after the campaign was a dull one, with much stock and a limited demand. The past week, however, has been entirely different. There has not been enough flowers of several kinds to go around. Moreover, prices have ranged high, which in itself indicates a strong demand on the part of the buying public. With roses selling at what amounts to a cent an inch, that is nine cents for a nine-inch stem, twelve cents for a twelve-inch stem, and so on, there has been no reason to complain.

All in all, members of the trade who have taken part in the various publicity movements may well feel that they have not wasted their time or their money. Looking back over the year they have had reason to observe Thanksgiving Day as heartily as any class of people. Moreover, prospects are still bright. At the same time the fact must be reckoned with that higher costs are coming, especially in the line of supplies. Makers of wooden boxes are already talking of a 25 or 30 per cent advance in the near future. Very likely other supplies will advance, too.

Nobody can tell when the peak of this movement will have been reached, but so long as the present era of high wages and prosperity continues there will be no lack of business for the florists. And it is a fact of more than passing moment that thousands of people who formerly could not be classed as flower buyers are now numbered among those who purchase flowers either regularly or whenever a special occasion arises. That is one result of war time conditions plus intelligent publicity work.

A wonderful garden

Fortunate indeed are plant lovers who live near enough to the Missouri Botanical Garden at St. Louis to take advantage of the endless opportunity which it offers for recreation, investigation and study. Its gardens and its greenhouses contain specimen plants not to be found anywhere else in the country. They are not arranged like the contents of a museum, however, as would have been the case years ago, no doubt, but are a part of the splendid display which make both garden and greenhouses as attractive as those on the best kept private estates.

The Garden has now begun the planting of a variety nut orchard which should prove of great interest and no little economic value.

It is particularly appropriate that the Garden be the institution to undertake this work, because of the fact that there is the greatest collection of wild nuts on the American continent within a radius of 200 miles of St. Louis. The lands adjacent to the Mississippi river and its tributaries contain tens of thousands of pecans, hickories, and black walnuts. Already from this wonderful collection there have been found a number of varieties of nuts that are of great merit, and it only remains for the virtues of these to become sufficiently well known to lay the foundations of a prosperous and enduring industry in Missouri, Kentucky, Southern Indiana, Illinois, and such other parts of the country as have similar climatic conditions.

So far as we can see, the only thing which the Missouri Botanical Garden really needs now is an up and coming press agent.

RAISING FERNS FROM SPORES.

There are several ways of propagating ferns, some being more suitable to certain genera than others, but the present article will be confined to a description of one method, which is probably the commonest and is certainly the most interesting.

Spores (so-called from the word "spora," a seed) very much resemble seeds, but whereas the former includes in its structure both an embryo (or young plant) protoplasm and an outer covering, the latter is actually the young plant itself in a very minute form. Also seeds produce flowering plants, spores otherwise.

The formation of the spores is as interesting as it is complex. They are generally to be found on the undersides of the fronds, or leaves, as they are commonly though incorrectly termed. The time to gather them is as soon as they turn brown but before they get over-ripe and burst. They, including the frond, are put in a paper bag for a few days to dry, but should be sown as soon after this as possible to get good varieties.

Shallow pans half filled with clean crocks and covered with a mixture of peat and leaf mould, with the addition of a little sharp sand, or, better still, broken bricks, to keep it open and sweet, are the best receptacles in which to sow them. This should be sterilized by immersing in boiling water or baking in ovens.

In sowing the spores care must be taken that there is no draught, otherwise they, being so small and light, are liable to get lost. Then cover with a sheet of glass, which should not be removed till after germination, as foreign spores are liable to be blown in and crowd the others out. Brown paper should be placed over the glass to keep out the light.

The first thing to be seen when germination has begun is growth called the "prothallus," looking like a common moss. Before the first true frond appears, these should be pricked out into boxes or pans prepared in the same way as seed boxes, but slightly rougher in texture. Great care must be taken in the handling of the prothallus, as it is extremely tender, and is liable to die if subjected to the least bruise, the death of one affecting others.

Soon after this, they should be potted up into small pots, using a compost of leaf mould, peat, plenty of sharp sand and a little loam.

All should be left in a warm house

CHRISTMAS PLANTS

Cyclamen, \$1.50 and up; Begonias, 75c to \$2 each; Poinsettias, single, 50c, 75c and \$1 each; pans, made up with Ferns and Peppers, \$1.50 to \$4 each.

FERNS, Scottii, Verona, Boston and Roosevelt, 50c to \$2 each.

FRANK EDGAR,

Waverley, Mass.

ANNOUNCEMENT

The New Crimson
Carnation for 1920

BERNICE

Orders filled in strict
rotation for December
and January delivery

STOCK LIMITED

WRITE FOR "DESCRIPTIVE" CIRCULAR

PRICE: { \$ 14.00 per 100
115.00 per 1000

W. D. HOWARD, Milford, Mass.

till they are taking root in the pots, when they may be hardened off (if a hardy species.).

Spring and summer are the best times of the year for the operation, but it may be done successfully at any season, and the winter season, when there is nothing to be done outside offers a suitable opportunity for those who have a greenhouse.—*Canadian Florist*.

BUFFALO'S SUCCESSFUL FLOWER WEEK

"Say it with Flowers" week campaign in Buffalo was a big success. There was also during the week a big Municipal Flower Show which was a very fine arrangement. The florists of Buffalo have become very enthusiastic in regard to this publicity work. The committee consisted of Wallace H. Eiss, chairman; Mark Palmer, treasurer; Robert Scott, Harold Brookins, C. T. Treichler, Arthur Kowalske and Edward Lehde. This committee is composed of three retailers, three wholesalers and one wholesale commission man.

The Municipal Flower Show that was held in Elmwood Music Hall was a wonderful creation. It excelled any Chrysanthemum show that I have yet seen in its design and carrying out. This was due to the fact that it was under the supervision of one man who had placed orders for the exhibition one year in advance. Everything was arranged according to schedule. The

ELLA GRANT WILSON.

NASSAU COUNTY HORTICULTURAL SOCIETY

Glen Cove, N. Y., Nov. 14.—The regular monthly meeting of the above society was held in Pembroke Hall, Glen Cove, on Wednesday, Nov. 12th, at 7 p. m., President Joseph Adler presiding.

Five petitions for active membership were received.

In the special class for table decorations for assistant gardeners, six tables were in competition. The president appointed the following to act as judges: Messrs. John F. Johnston, Jas. McCarthy and P. W. Popp. The following awards were made: T. McDougall, assistant to John W. Everitt, 1st; Arnold Gataire, assistant to Peter Smith, 2nd; and Alex. Marshall, assistant to Geo. Ferguson, 3rd.

The president presented the Mrs. F. B. Pratt silver cup for the best collection of hardy "mums" to John W. Everitt; the Hitchings silver cup for the best 12 "mums," four varieties, to Peter Smith; Mrs. A. L. Pratt's silver cup for the best table decoration to Geo. Ferguson.

The exhibits for our next meeting, to be held on Wednesday, December 10th, are: Pot or pan of paper-white narcissus, three heads of celery and twenty-five Brussels sprouts.

This December meeting will be the annual meeting and one which it is important that all members attend. The officers for the coming year will be elected at this time and the annual reports given.

HARRY GOODBAND, Cor. Secy.



"The Telegraph Florist"

Member of Florists' Telegraph Delivery

**124 TREMONT ST.
BOSTON**

H. F. A. LANGE

Worcester, Mass.

Delivers to all Points in New
England

150,000 Square Feet of Glass

Member Florists' Telegraph Delivery
Association

WORCESTER, MASS.

Randall's Flower Shop

HARRY I. RANDALL, Proprietor.
Member Florists' Telegraph Delivery

Providence, Rhode Island
Johnston Brothers
LEADING FLORISTS
38 Dorrance Street
Member Florists' Telegraph Delivery

Quality and Reliability
WARBURTON

FALL RIVER, MASS.

Deliveries of Flowers and Plants
in FALL RIVER and contiguous
territory.

The Beacon Florist
Beacon Street, **BOSTON**
Near Tremont

J. EISMAN, Manager, 14 years head
decorator and designer for Penn's.
Prompt, Efficient Service Guaranteed.



Park St., Boston

Flowers by Telegraph

Leading Retail Florists Listed by
Towns for Ready Reference. Orders
transferred by telegram or otherwise
to any of the firms whose address is
here given will be promptly and prop-
erly filled and delivered.

Beverly, Mass.—Beverly Flower Shop.
Boston—Penn the Florist, 124 Tremont St.
Boston—Zinn the Florist, Park St.

Brockton, Mass.—Belmont Flower Shop.
Boston, Mass.—The Beacon Florist,
Beacon St.

Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.
Buffalo, N. Y.—S. A. Anderson, 440 Main
St.

Cambridge, Mass.—Harold A. Ryan.
Cleveland, O.—J. M. Gasser Co., Euclid
Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th
St.

Cleveland, O.—The Smith & Fettes Co.,
735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643
Broadway.

Detroit, Mich.—J. Breitmeyer & Sons,
corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New
Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017
Grand Ave.

Lawrence, Mass.—A. H. Wagland.

Malden, Mass.—J. Walsh & Son.

New York—David Clarke's Sons, 2139-
2141 Broadway.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
son Co.

Taunton, Mass.—Hall the Florist.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—H. F. A. Lange.

Worcester, Mass.—Randall's Flower Shop,
22 Pearl St.

CAMBRIDGE, MASS.

581 MT. AUBURN STREET

HAROLD A. RYAN, Inc. Member
F. T. D.

BROCKTON, MASS.

Belmont Flower Shop Member
F. T. D.

HIGH GRADE PLANTS

For Retail Stores a Specialty

ASK FOR LIST

THOMAS ROLAND, Nahant, Mass.

LAWRENCE . . MASS.

A. H. WAGLAND

We Cover

LAWRENCE, METHUEN, ANDOVER,
NORTH ANDOVER, SALEM, N. H.
and Contiguous Territory
Member of F. T. D.

BEVERLY, MA S.

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the F. T. D. must be accompanied by
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Transfer Your Orders to

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National Capitol

At your service to deliver Flowers
or Designs on Order by Tele-
graph or otherwise. Prompt
Reliable Service.

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Flowers**

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Nothing Better

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"Says It With Flowers"

DARDS FLOWER SERVICE

has spent GUARANTEED SATISFACTION
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Regular European sailings now established.
Let us fill your orders for Steamer Flower
Baskets, Corsages and Artistic Boxes of
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ANDERSON service means fresh, sturdy
Stock and prompt deliveries in BUFFALO,
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CLEVELAND, OHIO

Flowers of Every Kind in Season

PHILADELPHIA

CHAS. H. GRAKELOW F. T. D.

Everything in Flowers

Broad Street at Cumberland

The Park Floral Co.

B. E. GILLIS, President.
E. P. NEIMAN, Secretary.

Member Florists' Telegraph Delivery

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**JOHN BREITMEYER'S
SONS**

Cor. Broadway and Gratiot Aves.
DETROIT, MICH.

**Artistic Designs - . . .
High Grade Cut Blooms**

We cover all Michigan points and good
sections of Ohio, Indiana and Canada.
Members Florists' Telegraph Delivery
Association.

SEVENTH ANNUAL INTERNATIONAL
FLOWER SHOW, GRAND
CENTRAL PALACE, NEW
YORK, MARCH 15-21,
1920.

Preliminary arrangements for the
show are practically completed even at
this early date, and prospects are
bright for another very successful
show. The final schedule of premiums
is now in press, and if anyone inter-
ested should not receive a copy within
the next ten days, he should make ap-
plication to the secretary for one. In
some of the usual classes the value of
the prizes has been materially in-
creased.

The prizes in the 100 sq. ft. collec-
tion of cut orchids have been fixed as
\$200 first and \$100 second. As much
as \$1000 is offered in the class cover-
ing a 500 sq. ft. bulb garden in three
prizes, \$500, \$300 and \$200. In the
open class for the display of rose
plants in the form of a growing gar-
den, the prizes offered are \$500, \$300
and \$200, and similar prizes are offered
in the class for the display of cut
roses covering 300 sq. ft., and this
class is to be repeated on the Thursday
of the show week, with the prizes du-
plicated, an innovation which the pub-
lic will appreciate. The prizes in the
class for a display of carnations cover-
ing 150 sq. ft. of space are \$150, \$100
and \$50.

The official program is well under
way, and will contain, beside the

CLEVELAND

A. GRAHAM & SON

5523 Euclid Ave.

Will take good care of your orders

Members of F. T. D. Association.

DAVID CLARKE'S SONS

Deliver orders from any part of the country to

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LYN and LONG ISLAND

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The Far-Famed Flowers of

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any occasion, in any part of the Dominion.

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THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

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BOSTON, MASS.

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CATALOG OF "BIG CROP" SEEDS

Special Prices for
Florists and Market Gardeners.

Write for a copy at once—it will save you
money.

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We are subscribers to the Nurserymen's
Fund for Market Development, also "Say
It With Flowers" Publicity Campaign.

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BEEF, CARROT, PARSNIP, RADISH and
GARDEN PEA SEED in variety; also other
items of the short crop of this past season
as well as a full line of Garden Seeds, will
be quoted you upon application to

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82 Dey St., NEW YORK and ORANGE CONN.

BURNETT BROS.

**Seeds, Bulbs, Plants
Etc.**

92 Chambers St., New York
Write for our Illustrated Catalog

MICHELL'S CHRISTMAS GREENS

PLEASE NOTE—All Christmas Greens
shipped at buyer's risk of delay or
spillage in transit, when forwarded by
Express or by Freight and Boat. We
recommend shipping by Express. All
prices subject to change without notice.

HOLLY (LOOSE)

Per 1/4 case... Per full case...\$7.00
Per 1/2 case...

HOLLY WREATHS

	25	50	100
12 inch	\$6.00	\$11.00	\$20.00
14 inch	7.00	13.50	26.00
18 inch	11.00	20.00	38.00

LAUREL, EXTRA HEAVY

In 25 yard coils, made on double rope.	
25 yards... \$3.25	250 yards... \$25.00
50 yards... 6.00	1000 yards... 90.00
100 yards... 11.00	

MISTLETOE (MEXICAN)

1 lb.....\$.50	10 lbs.....\$4.50
5 lbs.....2.40	25 lbs.....10.00

BOXWOOD (CUT)

In 50 lb. boxes only; \$11.25 per 50 lbs.

LYCOPODIUM (LOOSE)

25 lbs.....\$4.00	100 lbs.....\$14.00
50 lbs.....7.25	

LYCOPODIUM WREATHING

In 10 yard pieces	
10 yards... \$1.10	250 yards... \$22.00
50 yards... 5.00	1000 yards... 85.00
100 yards... 9.00	

Also all Seasonable Seeds, Bulbs and
Supplies. **SEND FOR OUR HANDY
FLOWER SEED ORDER SHEET**, if
you do not receive a copy.

P. S. New customers who may not be rated in Dun's or Bradstreet's will kindly send money orders or trade references with order, to avoid delays in shipment of Christmas Greens. If you have an account with us, wire your orders.

**MICHELL'S SEED HOUSE, 518 Market Street
Philadelphia**

usual program matter cultural articles
by leading floriculturists.

The Garden Clubs of America, the
well known national organization, has
arranged for the installation of a special
booth covering an area of 1,500
sq. ft., in which lectures will be given
daily, and conventions of different
clubs held. It is also expected that an
illustrated lecture will be given each
afternoon and evening. There will be
a Tea Room, as before, conducted by
ladies connected with hospital work.

The Flower Show Committee is assured
that the retail florists will take
a more active part in this show, which
will add to the interest. The Dupont
interests, which now have control of
the Grand Central Palace, will also
participate in the exhibition through
the International Exposition Co.

JOHN YOUNG, Secy.

1170 Broadway, New York.

HOLIDAY PREPARATIONS

Retail florists should be busy making
preparations for holiday trade. It
is the well decorated and attractive
store which gets the holiday business.
Laurel and boxwood seem likely to be
plentiful and apparently there is going

to be enough holly and mistletoe to go
around. Many partridge berries are
coming into the market, and other red
fruit may be used for display. Don't
overlook the value of Jerusalem cher-
ries and Ardisias. Not only do they
sell readily but they help to give a
cheerful note of color to the store. As
soon as possible get to work filling
pans, baskets and other receptacles.
Little ferns, especially holly ferns and
birdsnest ferns, sell readily when put
up in fancy baskets, especially if a
piece of ribbon is tied to the handle.
In making up your pans and baskets
see that all the plants are well watered
in advance. Don't delay in getting in
your order for Christmas materials of
all sorts. Deliveries are going to be
slow this year and the early buyer
gets the best service.

While the chrysanthemum season is
still on don't fail to make a list of the
different varieties which have made
especial appeal to you or which seem
to have caught the public. The list
will differ in different sections of the
country, but in many cases some par-
ticular new plant has made a hit and
customers will be almost certain to
ask for it another season.

INSECTS AND FUNGI ATTACKING CYCLAMEN

Dear Sir:—Two fungus and three insect troubles usually interfere with and generally are encountered in the cultivation of cyclamen. All of them, however, are manageable and no serious damage should ever occur if they are properly understood and the proper remedies are employed at the right time to check them. They usually make their appearance when the plant has been neglected, and once their presence is discovered the grower can ill afford not to be on the alert throughout the entire season of their growth until maturity. To keep, therefore, the plants in continuous growth, and to comply with their cultural requirements will prevent much hardship and not infrequently disappointment.

Of the fungi troubles, we have the following:

Phomose (Phomosa Cyclameneae). This is a disease of the foliage, not infrequently causing loss of the entire crop. It is usually recognized by its dark, irregularly shaped, large spots upon the leaves which later dry and become lighter in color. All diseased leaves should be picked off and burned and the plant sprayed with Bordeaux Mixture.

Glomerellose (Glomerella rufmuculans var. cyclamini). This is another disease that is attacking the leaves. These spots are circular and watery, sometimes accompanied with great numbers of black hairy acervilli. The same treatment as for Phomosa is effective here too.

Of the insect pests we have the Green Fly, Thrip and Mite. No mention of the work of the Green Fly and the Thrip is necessary. Practically every grower is well acquainted with them. Very few, however, are familiar with the Mite. This is another tiny insect, hardly visible to the naked eye, but usually causing more harm than the Green Fly and Thrift combined. A sure indication of its presence is when the first flowers come deformed or abnormally streaked with colors that are darker in shade. It occasionally also curls the leaves and makes them look variegated like. To have the plants plunged in tobacco stems, to syringe them daily three or four times with cold water and vaporize nicotine extracts when they are in the greenhouse, are the best and most effective remedies against them.

This is in reply to your request in a recent number of HORTICULTURE for advice and information about cyclamen.

BARGAINS in BULBS

Special prices to clear a belated shipment.
Wire orders overnight for shipping following day.

	Per 1000		Per 1000
HYACINTHS —1st size	\$85.00	TULIPS —Double Early	
" 2nd size	70.00	Couronne d'Or (yellow).....	\$35.00
TULIPS —Single Early		Imperator Rubrorum (red).....	38.00
Yellow Prince.....	25.00	Murillo (Pink).....	28.00
Mon Tresor (yellow).....	42.00	TULIPS —Darwin	
Kelzerkroon (red and yellow)...		Baron Tonnaye (rose).....	25.00
Prince of Austria (orange scarlet)	27.00	Mad Krelage (red).....	27.00
La Reine (white).....	27.00	White Queen (white).....	23.00
		Rev. Ewbank (lavender).....	27.00

All above prices net, f. o. b. New York.

New Crop Gladiolus Bulbs, French Immortelles (just arrived)
Bouquet Green, Holly, and all Xmas supplies.
Ask for Price List

Chicago

VAUGHAN'S SEED STORE

New York

THIS SEASON'S NEW ROSES

PILGRIM CRUSADER PREMIER RUSSELL HADLEY

We are receiving daily shipments of these new Roses, in large quantities, and can furnish same on short notice.

We have a large stock at all times of choice CARNATIONS, CHRYSANTHEMUMS, ORCHIDS, VALLEY and AMERICAN BEAUTIES.

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CYCLAMEN—BEGONIAS—PRIMROSES

Christmas Stock of all Kinds in Fancy Grades
Come and Inspect Our Stock. Never in Better Condition

139 Beaver Street

WALTHAM, MASS

men insect and fungi troubles and their control.

S. J. SHERMAN, B. S.,
528 Christopher Ave.,
Brooklyn, New York.

BOSTON.

Ex-Mayor Baker of Syracuse has been visiting in town.

H. M. Totman of Randolph, Vt., has been in the city for several days buying stock.

P. T. Barnes of the Department of Agriculture at Harrisburg, Pa., and well known to many florists and nurserymen has been visiting relatives and friends in that vicinity for the past week.

A Card This Size

Costs only 90c. per Week
on Yearly Order

It would keep your name and your specialty before the whole trade.
A half-inch card costs only 45c. per week on yearly order.

THE National Nurseryman

The oldest and best established journal for nurserymen. Circulation among the trade only. Published monthly. Subscription price \$1.50 per year. Foreign subscriptions, \$2.00 per year. In advance. Sample copy free upon application from those in the trade enclosing their business card.

National Nurseryman Pub. Co., Inc.
HATBORO, PA.

DESTROYED BY HAIL

Last Summer a florist who had imagined he was outside of the hail section lost upwards of 50,000 square feet of glass by hail with no insurance to recompense him.

He is now a member of the Florists' Hail Association of America.

Profit by experience and join the Association now. Address

JOHN G. ESLER, Secretary
Saddle River New Jersey

ALL READY CARNATION LADDIE

STRONG CLEAN CUTTINGS

NO WAITING

CAN SHIP TOMORROW

\$10 per 100

\$90 per 1000

L. J. REUTER CO.

15 Cedar Street, Watertown P. O.

BOSTON, MASS.

PROSPECTS OF THE COMING SEASON.

By Arthur Neissen.

At the last meeting of the Lancaster County Florists' Association Arthur Neissen made a talk which has aroused much interest. In part it was as follows:

First there is no doubt in my mind, but that the season will be a very satisfactory one. Your share of whatever prosperity is in store for us will be in proportion to the effort that you have put forth to produce it. The laws of compensation are not likely to permit you to share to a larger extent.

Some people look to the government to cure all social unrest and business disturbances. The experiment in most cases has been a sad failure. We welcome any legislation of a constructive nature, but we should resent government interference with business. Unfortunately the people are still sending politicians to Washington to manage our national affairs, instead of business men who are better qualified to understand the needs of the country.

Through our trade organization, such as the Society of American Florists the Florists' Telegraph Delivery and many local clubs, we have aimed to create a more favorable understanding among members of the trade and the different branches of our business. It has been their endeavor to procure close co-operation and undoubtedly much good has been accomplished.

The F. T. D. has probably accomplished more in that direction than any other effort, for the reason that the benefits derived are traceable to actual visible results. When an F. T. D. Florist receives a telegram in the morning for a \$25.00 order, there is no question in his mind that the F. T. D. is a good institution, the actual facts are in evidence.

There has been a great deal of discussion about the uplift of our business, how to increase sales, improve working conditions and a hundred other subjects. Who is going to right all the wrongs? Who is the big leader among us that will be our standard bearer and show us the way? Is there such a man in our profession? I say yes, thousands of them, if only each and every one of our profession will see his duty to himself, to his neighbor, and to his business. Everybody should set his own house in order and the rest would be comparatively easy.

The great trouble is, we complain because nothing is being done. What are you doing to help build your own and your neighbor's business? What are you doing to elevate our profession to make it more attractive for the young men and women that will carry on our business in the future? What are you doing to make our business bigger and more profitable? You have the opportunity every day and every minute of the day. Doing your duty—that is the solution.

Co-operation means nothing unless you personally are cooperating. An advertising campaign misses its mark completely, unless you are a part and parcel of the campaign. Unless the public can see a reflection of the na-

tional advertising campaign in your store, you are losing the benefits of the advertising.

The S. A. F., our national publicity campaign can do nothing for you unless you are willing to do something yourself. Sometimes we hear an argument that only the big retail stores are being benefited by national publicity. Admitting that they are being benefited, it is only to the extent that they are taking advantage of the opportunity that exists for all alike. Every florist or group of florists should do some local advertising and if the local effort is linked together with the national publicity, there is bound to be satisfactory results. Every florist in the country should be a subscriber to the National Publicity Campaign, but that is not sufficient. You must work along with the publicity campaign. Any collective movement gives you an opportunity to participate in its benefits but unless you take advantage of that opportunity you can not expect to accomplish anything.

We often hear the remark that we must educate the public to the use of flowers. But first of all let us educate ourselves to the point that we thoroughly understand our own business. Some years ago I expressed a thought that the S. A. F. should start a campaign of education among the retail florists. Have three days' sessions at some central point and bring all the florists from the neighboring cities together and have an educational session. Show them by actual demonstration how to link the national publicity campaign with their own business; teach them any thing new in the business—the correct margin of profit, the value of local advertising or any

HENTZ & NASH, Inc.

Wholesale Commission Florists

55 and 57 West 26th Street
Telephone No. 755
Farragut **NEW YORK**

The Meyer Florists' Green Thread is different from any other make. Every spool contains 2 ounces of actual thread, 16 ounces to a pound. See that you get the Meyer Florists' Green Thread and you will get the very best thread in the world. Don't take any substitutes.

Manufactured by

John C. Meyer Thread Co.
BOSTON, MASS. Mills at Lowell, Mass.

For All Flowers in Season Call on

THE LEO NIESSEN CO.

1201 Race St. Philadelphia, Pa.

EDWARD REID**WHOLESALE FLORIST**

1619-21 Ranstead St., Philadelphia, Pa.

CHOICE BEAUTIES, ORCHIDS, VALLEY, ROSES
and all Seasonable Varieties of Cut Flowers**Wired Toothpicks**

Manufactured by

W. J. COWEE, Berlin N. Y.

10,000...\$2.25 50,000...\$9.75 Sample free.

For Sale by Dealers

GEORGE B. HART**WHOLESALE FLORIST**

24 Stone St., Rochester, N. Y.

CUT FLOWER BOXES**EDWARDS FOLDING BOX CO.**MANUFACTURERS
PHILADELPHIA, PA.

problem that might be brought up for discussion. A great deal of good could be accomplished. The distribution or rather the selling of flowers at retail is the all important feature of our business that needs development. The production will take care of itself. I will leave it to the progressiveness of the grower to keep up with any effort made by the retailer.

In my talk I have wandered somewhat from the main point that I wish to emphasize most strongly and that is that no one can help you unless you are willing to help yourself. Our business is in a very healthy condition. The past season was undoubtedly one of the best we ever had and the coming season looks promising to me. If we could only arouse every one of our craft to fully realize the wonderful opportunities that exists today greater opportunities than we have ever had in the past and let every man do his share 100 per cent our business would grow in leaps and bounds.

Doing your duty—that is the final answer.

NORTH SHORE HORTICULTURAL SOCIETY.

Manchester, Mass., Nov. 26.

This society held its regular meeting in the Horticultural Hall on Friday evening, Nov. 21. The North Shore Forestry Protective Association were the guests of the society. Mr. Allen S. Peabody, chairman of the association, gave an interesting lecture on forestry and also outlined the aims and needs of the Forestry Protective Association on the North Shore, the main object of the association being the preservation and improvement of the woods along the shore.

The society offered the free use of its hall to the Forestry Association for its meetings.

The society also voted to give the Garden Club of America the use of the hall to co-operate in every way possible with the Garden Club when they have their convention here next year.

Mr. J. K. L. M. Farquhar spoke on forestry and kindred subjects.

Officers were elected on Nov. 7. They are as follows: President, Mr. Frank P. Knight; vice-president, Alfred E. Parsons; secretary, Leon W. Carter; treasurer, Frank Foster; librarian, W. C. Horton.

Members present from out of town were Messrs. John Farquhar, J. P. A. Guerineau, Robert E. Montgomery and Julius Huerlin.

The cock stew was given by the retiring vice-president and treasurer, Eric Wetterlow, and John Jaffray. President Knight also contributed to the success of the affair. W. T.

H. E. FROMENT**Wholesale Commission Florist**
Choice Cut FlowersNew Address, 143 West 28th St., NEW YORK
Telephones: 2200, 2201, Madison Square.**WM. P. FORD****Wholesale Florist**

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Telephone 5335, Farragut

Call and inspect the Best Establishment
in the Wholesale Flower District.**WALTER F. SHERIDAN**

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Metal Designs, Baskets, Wire Work & Novelties
and are dealers in
Decorative Glassware, Growers and
Florists' Requisites**THE KERVAN CO**

Fresh Cut Decorative Evergreens

Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
Catalog of Greens and Florists' Supplies

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WILLIAM H. KUEBLER

Brooklyn's Foremost and Best

WHOLESALE COMMISSION HOUSE

A First Class Market for all CUT FLOWERS

Willoughby St. Brooklyn, N. Y.

WE WANT MORE SHIPPERS

We have a numerous clientele of New York City buyers and the demand exceeds our supply. This is especially true of Roses. We have every facility and abundant means and best returns are assured for stock consigned to us.

Address Your Shipments to

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111 W. 28th St., New York

D. J. Pappas, Pres.

FRANK J. REYNOLDS CO.**Wholesale Florists**

Boston Co-operative Flower Market

260 DEVONSHIRE STREET

BOSTON, MASS.

Notes and Comments

KUNDERD'S BIG BULB SALE

Mr. A. E. Kunderd, of Goshen, Indiana, reports the sale of all the surplus Gladiolus bulbs of his entire catalog list for this season, and will not issue a catalog for 1920. The sale of the stock was made to Mr. Albert W. Henn, President of The National Acme Co., of Cleveland, Ohio, for a consideration of \$60,000. This is the largest single Gladiolus bulb sale on record. Mr. Henn is the owner of extensive farms near Painesville, Ohio, where he raises the highest class pedigreed stocks of farm animals, as well as high class farm seeds, etc. The management of the bulbs and seed department is under the supervision of Mr. Ralph E. Huntington, of Painesville, Ohio, the well known nurseryman and bulb specialist. The Gladiolus is Mr. Henn's favorite flower and he has grown most of the finest varieties of the leading specialists for years. During the season just past, he grew some 200 of Mr. Kunderd's named varieties which were a great revelation to him, and a great attraction to tourists on the main line of the National Highway between Buffalo and Cleveland, not far from the Garfield home at West Mentor, Ohio. It is Mr. Henn's intention not to resell any of the bulbs the present season in order to be able to first grow on larger quantities in order to supply the demand from seedsmen and the catalog and nursery trade.

It may be remarked in passing that Painesville is the home of The Storrs & Harrison Co., and a number of other well known nurseries. In all, some 17,000 acres of nursery stocks are grown in this vicinity, making it perhaps the largest section where nursery stock is grown in America, if not in the world.

GENERAL NEWS NOTES.

John F. Piper, foreman for Charles H. Totty Co. of Madison, N. J., sails for England, Nov. 29, on the Mauretania. His trip abroad is to be one combining business and pleasure and all his many friends wish him a pleasant voyage.

Fire of unknown origin recently destroyed the florist shop, dwelling and two hothouses of Mrs. J. Carrol, 11th street, and Cedar avenue, Darby, Pa.

Says the Richfield, N. Y., Mercury: What is to be considered a record chrysanthemum has been grown at the

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

B. A. SNYDER CO. *Wholesale Florists..*

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New England Florist Supply Co.

276 Devonshire Street,

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MICHIGAN CUT FLOWER EXCHANGE, Inc.

WHOLESALE COMMISSION FLORISTS

Consignments Solicited

Hardy Fancy Fern Our Specialty

264 RANDOLPH ST., DETROIT, MICH.

The House for Quality and Service

ZECH & MANN

We are Wholesale Florists Doing a Strictly Wholesale Business

30 East Randolph Street, CHICAGO

Iroquois Farms greenhouse, Coopers-town, by the gardener. The chrysanthemum, which is of the garden champion variety, measured 45 inches in circumference and 12 inches in diameter and is orange bronze in color. He also has the distinction of growing a 45-lb. cabbage.

H. B. McCullough of the J. M. McCullough & Sons Co., Cincinnati, O., is in the hospital as the result of an auto accident. Very close call and a miraculous escape.

Ben Delancy of the J. Chas. McCullough Co., is laid up with broken arm the result of an auto accident.

NEW ENGLAND.

Alexander H. Johnson of Providence was honored by being appointed sergeant-at-arms at the convention of the American Legion in Minneapolis.

Robert Clifford, of the Leikens, Inc., stores, expects to sail for Porto Rico soon to take charge of the floral department in a new hotel there.

The greenhouses of H. M. Totman Co., Inc., at Randolph, W., are being improved and enlarged. The office and work room have been replaced by a two story addition, which gives a much better work room on the ground floor, and on the second floor a carpenter shop and drying room. A new boiler has been installed in the cellar, from the fact that additional building in the spring will nearly double the present glass surface of the greenhouses. The company also expect to build a cement bulb cellar. The improvements already made and to be made, will amount to \$12,000 in valuation.

Frederick Shawyer, for several years head gardener for Miss Mary Shars-

THE BOILER OF Unequalled Fuel Economy

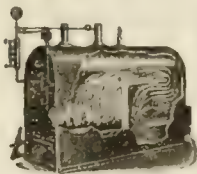
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1918.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

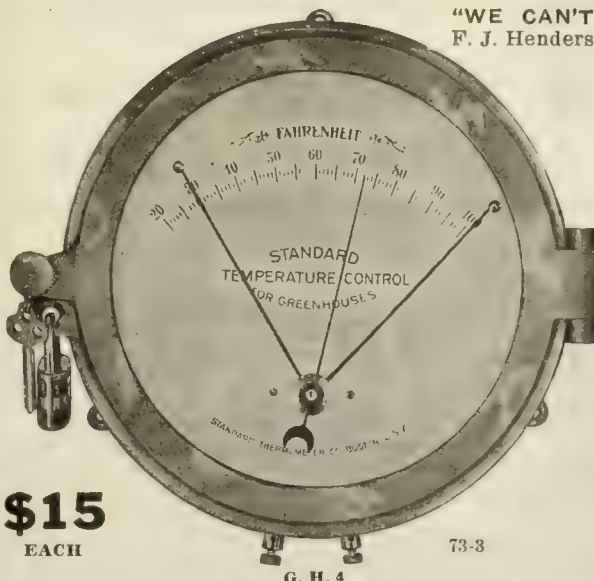
wood, near Westerly, R. I., was recently killed by being struck by an automobile.

THE MARKET.

There was a good stiff market for Thanksgiving Day week. Prices for the best stuff were all that could be wished. The prices for roses amounted to practically one cent an inch for top quality, which was some price. Good carnations have been selling for six cents, with Pink Delight and Morning Glow as the leaders. Matchless has been fine as to quality, but whites have sold a dollar off the market. Sweet peas and violets are in less than normal supply and are selling as high as \$3.00 a bunch. Stevia is coming in but slowly; there ought to be more of it at this season. All in all, business is very satisfactory all over the country and there is every reason to believe that it will continue so the coming week.

YOUR BEST FRIEND

"WE CAN'T DO WITHOUT IT."—
F. J. Hendershot & Sons, Ogden, Utah.



\$15

EACH

G. H. 4

STANDARD THERMOMETER CO.

73-3

The Standard Thermostat is the best business partner and friend you can have. It protects your growing crops from ruin by sudden changes in temperature. It is infallible, inexpensive—more reliable than a night fireman.

The Standard Thermostat will ring a bell whenever your greenhouse temperature rises or falls to the danger point. Place the bell at your bedside or anywhere you please.

This is a word to the wise—a buy word to the wise grower. Sudden temperature ups and downs ruin thousands of plants every year. Protect yours! Install a Standard Thermostat now. It costs only \$15.00. Write today.

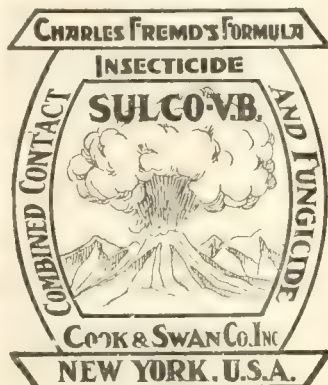
(G. H. 3, same as G. H. 4, only not in locked case. \$10.00)

Lester Street, BOSTON, MASS.

WHOLESALE FLOWER MARKETS—Trade Prices Per 100—To Dealers Only

	BOSTON Nov. 24	NEW YORK Nov. 24	PHILA. Nov. 24	CINC'L Nov. 24	CHICAGO Nov. 24	PITTSBURG Nov. 24	BUFFALO Nov. 24
Roses							
Am. Beauty	12.00 to 74.00	3.00 to 50.00	20.00 to 75.00	10.00 to 50.00	12.00 to 50.00	8.00 to 50.00	5.00 to 60.00
Hadley	9.00 to 40.00	3.00 to 25.00	8.00 to 15.00	8.00 to 2.00	4.00 to 15.00	4.00 to 15.00	8.00 to 10.00
Hoosier Beauty	6.00 to 3.00	3.00 to 6.00	6.00 to 20.00	5.00 to 15.00	4.00 to 15.00	4.00 to 15.00	4.00 to 15.00
Killarney	5.00 to 25.00	2.00 to 6.00	6.00 to 10.00	5.00 to 10.00	4.00 to 10.00	4.00 to 10.00	4.00 to 10.00
White Killarney	5.00 to 25.00	2.00 to 6.00	6.00 to 10.00	5.00 to 10.00	4.00 to 10.00	4.00 to 10.00	4.00 to 10.00
Mrs. Aaron Ward	9.00 to 30.00	1.00 to 8.00	6.00 to 8.00	5.00 to 10.00	4.00 to 10.00	4.00 to 10.00	4.00 to 10.00
Mrs. Chas. Russell	12.00 to 4.00	3.00 to 20.00	15.00 to 30.00	6.00 to 25.00	6.00 to 30.00	6.00 to 30.00	6.00 to 30.00
Mr. Geo. Sawyer	12.00 to 40.00	4.00 to 6.00	6.00 to 10.00	6.00 to 20.00	4.00 to 10.00	4.00 to 10.00	4.00 to 10.00
Columbia	6.00 to 30.00	3.00 to 20.00	12.00 to 30.00	6.00 to 30.00	6.00 to 20.00	6.00 to 20.00	6.00 to 20.00
Maryland	6.00 to 25.00	2.00 to 6.00	6.00 to 10.00	6.00 to 10.00	4.00 to 10.00	4.00 to 10.00	4.00 to 10.00
Ophelia	10.00 to 3.00	2.00 to 10.00	6.00 to 15.00	5.00 to 20.00	5.00 to 12.00	4.00 to 15.00	4.00 to 15.00
Adiantum	.75 to 1.00	.75 to 1.00	1.00 to 1.50	1.00 to 1.50	1.00 to 1.50	1.00 to 1.50	1.00 to 1.50
Asparagus plum 100 bchs	.45 to .50	.15 to .25	to	25.00 to 50.00	5.00 to 15.00	40.00 to 50.00	40.00 to 50.00
Asparagus plum 100 bchs	.25 to .40	to	to	25.00 to 35.00	25.00 to 30.00	60.00 to 75.00	60.00 to 75.00
Pom Pons	25.00 to 1.25	to	to	to	to	to	to
Bonaffon	1.00 to 5.00	to	to	to	to	to	to
Calendulas	1.50 to 5.00	5.00 to 15.00	4.00 to 5.00	3.00 to 4.00	2.00 to 6.00	4.00 to 6.00	4.00 to 6.00
Carnations	5.00 to 8.00	1.00 to 3.00	6.00 to 10.00	4.00 to 8.00	3.00 to 5.00	3.00 to 4.00	3.00 to 4.00
Chrysanthemums	.50 to 5.00	4.00 to 35.00	15.00 to 40.00	10.00 to 50.00	15.00 to 35.00	8.00 to 50.00	8.00 to 40.00
Calla	2.00 to 3.00	to	to	to	2.00 to 3.00	to	to
Ferns, Hardy	1.50 to 2.00	to	20.00 to 30.00	3.00 to 35.00	1.50 to 2.00	to	to
Ga'ax leaves	2.00 to 15.00	2.00 to 15.00	15.00 to 2.00	15.00 to 20.00	to	to	to
Marguerite	.75 to 3.00	to	to	to	15.00 to 20.00	to	to
Narcissus	2.00 to 4.00	.50 to 1.50	to	to	to	to	to
Orchids Cattleyas	75.00 to 125.00	to	150.00 to 2.00	to	to	75.00 to 100.00	to
Orchids Cypripediums	to .75	to	to	15.00 to 20.00	20.00 to 25.00	to	to
Sweet Peas	1.50 to 4.00	1.00 to 1.50	2.00 to 4.00	2.00 to 4.00	2.00 to 3.00	to	1.00 to 2.00
Snap Dragon	.50 to 2.00	.50 to 2.00	6.00 to 10.00	6.00 to 8.00	to	.50 to .75	4.00 to 6.00
Violets	2.00 to 2.50	.25 to .75	1.00 to 2.00	.50 to 1.50	50.00 to .75	.75 to 1.00	.75 to 1.00

IN LINE FOR FALL SPRAYING IN NEW ENGLAND



SAN JOSE SCALE
OYSTER SHELL SCALE
BAY TREE AND PALM SCALE
SCURFY BARK LOUSE
PEAR PSYLLA
CLUSTERS OF APHIS EGGS
HANG OVER FUNGUS SPORES OF THE
BROWN ROT OF THE PEACH AND
OTHER STONE FRUITS.
PEACH LEAF CURL
APPLE CANCKER AND SCAB

Destroy the above named insects and fungus spores by spraying them with

SULCO-V.B.

A combined contact insecticide and fungicide of known reliability

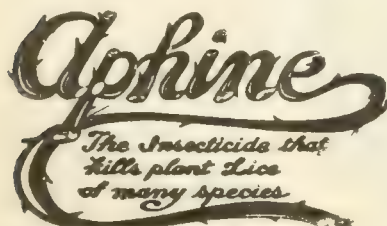
Simple, Sure and Safe — Right in Principle and Price

From your dealer or direct—go to your dealer first

Address **COOK & SWAN CO. Inc.**

118 Front Street
NEW YORK CITY

141 Milk Street
BOSTON, MASS.
Geo. H. Frazier, Mgr.



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and mild scale.

Quart, \$1.00; Gallon, \$2.50.

FUNGINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.

Quart, \$1.00; Gallon, \$2.50.

VERMINE

For eel worms, angle worms and other worms working in the soil.

Quarts, \$1.00; Gallon, \$3.00.

SOLD BY DEALERS

Aphiae Manufacturing Co.

MADISON, N. J.



Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Ants, etc., without injury to plants and without odor. Used according to directions, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

½ Pint, 30c.; Pint, 50c.; Quart, 90c.;

½ Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00.

Direction on package.

LEMON OIL COMPANY

Dept. S. 420 W. Lexington St. Baltimore, Md

CAMBRIDGE

NEW YORK



World's Oldest and Largest
Manufacturers of

FLOWER POTS

WHY?

A. H. HEWS & CO., INC.

Cambridge, Mass.

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mention **HORTICULTURE**

Rambling Observations of a Roving Gardener

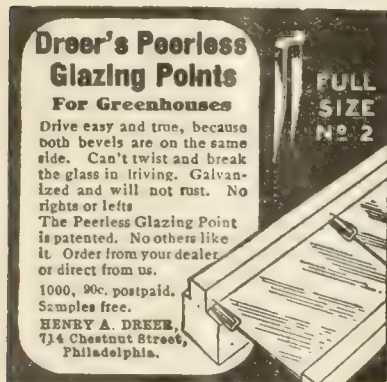
Chrysanthemum sibiricum has made a fine display in the Arnold Arboretum this fall. This attractive plant is still rare in gardens, although it was introduced into this country fourteen years ago by Professor Jack who found it on Poukan-shan, the mountain close to the city of Seoul. This late-flowering chrysanthemum is perfectly hardy; it produces seeds freely, and spreads also by underground shoots, so that once established it is likely to be a permanent feature in the garden. It is a shrub eighteen or twenty inches tall, with slender stems, woody at base, deeply divided, pale green, pungently aromatic leaves and white daisy-like flowers an inch and a half in diameter.

A form with pale rose-colored flowers has been raised in this country. A handsomer plant now in bloom is *Chrysanthemum nipponicum* which is commonly cultivated in Japanese gardens and which is believed to grow naturally on the shores of some of the smaller islands of northern Japan. It is a stout-stemmed, compact-round-topped shrub which under conditions favorable to it grows from two to three feet tall and three or four feet through. The flowers are produced on long stout stalks, each from the axil of one of the upper leaves; and as the flower-stalks increase in length from the lowest to the one in the axil of the topmost leaf the flowers are arranged in a broad flat cluster in which buds continue to open during many weeks or until they are destroyed by cold. The flowers are daisy-like with broad, pure white ray-flowers, and are from two to two and a half inches across.

The flowers of this Japanese *Chrysanthemum* are sometimes injured in Massachusetts by October frosts. It is better suited, like the Japanese Anemone, to regions which enjoy a longer autumn than that of Massachusetts. It grows well in the neighborhood of Philadelphia and there are good plants on Long Island. With the protection of a pit or a cool greenhouse it would probably continue to open its flower-buds until Christmas.

COMING EXHIBITIONS.

March 24-28, 1920, Boston, Mass.—Exhibition of orchids and other plants of the Massachusetts Horticultural Society at Horticultural Hall. William T. Rich, secretary, Horticultural Hall, Boston.



MASTER BRAND CONCENTRATED MANURE!

Greenhouse and Garden Fertilizers. Write us for detailed information and prices on

**High Grade Concentrated
Sheep Manure**

and our

Vine and Plant Manures

PROTO FEED & GUANO CO.

4121 S. La Salle St.
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MASTICA
For Greenhouse
Glazing
USE IT NOW
F. O. PIERCE CO.
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NEW YORK

Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Last longer than putty. Easy to apply.



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CONCENTRATED PULVERIZED
MANURE
Pulverized or Shredded
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The Florists' Standard of uniform high quality for over ten years. Specify **WIZARD BRAND** in your Supply House Order, or write us direct for prices and freight rates.
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PERCO-BRAND ANT EXTERMINATOR
Does Kill Them. Ask for Prices.
PERFECTION CHEMICAL CO., INC.
151 H Washington St., Flushing, N. Y.

ASPARAGUS

Asparagus sprengeri, 3-inch pot size, good bushy plants, \$13.00 per 100 out of pots. Cash please. J. L. CHAPMAN, Florist, Beverly Farms, Mass.

ASPARAGUS PLUMOSUS

Asparagus plumosus seedling: \$1.00 per 100; \$6.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

BULBS

C. KEUR & SONS, HILLEGOM, Holland. Bulbs of all descriptions. Write for prices. NEW YORK BRANCH, 32 Broadway.

CANNAS

For the best Up-to-Date Cannas, get new price list. THE CONARD & JONES CO., West Grove, Pa.

CARNATION STAPLES

Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c; 3000 for \$1.00 post-paid. I. L. PILLSBURY, Galesburg, Ill.

DAHLIAS

Peony Dahlias Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker. Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

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A Standardized, Complete and Inexpensive Line. Ask for Prices.
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Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2 1/4-inch pots at \$15 per 100—larger quantities on application. J. H. FEISSER, 7-11-741 Hamilton Ave., North Bergen, N. J.

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Wood labels for nurserymen and florists. THE BENJAMIN CHASE CO., Derry Village, N. H.

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HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laelio-Cattleyas our specialty. One trial order solicited.



A Fitting for each requirement. Get acquainted with our method of Bracing, Shelving, Piping, etc. Each Fitting adds neatness to your house and reduces the labor cost of repair work in general to a very low figure. Let us send you our catalog.

ADVANCE CO.
Richmond, Ind.

PEONIES

Peonies. The world's greatest collection, 1200 sorts. Send for list. C. BETSCHER, Canal Dover, O.

SPHAGNUM MOSS

Live Sphagnum Moss, orchid peat and orchid baskets always on hand. LAGER & HURRELL, Summit, N. J.

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Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. J. H. TROY, Mount Hissarlik Nursery, New Rochelle, N. Y.

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Inexpensive. Efficient.
PERFECTION CHEMICAL CO., INC.
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WILLIAM E. HEILSCHER'S WIRE WORKS, 264 Randolph St., Detroit, Mich.

SITUATIONS WANTED

SITUATION WANTED—As foreman, 21 years experience with all pot plants. Roses, Orchids, Mums and Carnations. Can produce results. Excellent references. Age 36. Address, J. K., care HORTICULTURE.

HELP WANTED

Two apprentices to learn carnation growing. Apply to WILLIAM SIM, Cliftondale, Mass.

WE ARE SPECIALISTS IN

GREENHOUSE GLASS

Free from Bubbles
Uniform in Thickness

PAINTS and PUTTY

Greenhouse White (Semi-Paste) The Paint Particular Florists Prefer

It will pay you to get our estimates.

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251 Elm Street BUFFALO, N. Y.

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LILIUM GIGANTEUM

Liberal grades, full count, perfect condition—Better bulbs cannot be bought at fancy prices.

AVAILABLE AS FOLLOWS

F.O.B. New York	6-8	7-9	8-10	9-10	10-11	11-12	F.O.B. Chicago	7-9	9-10	10-11
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PRICES AS FOLLOWS

6-8	400 per case	\$42.00 per case	9-10	200 per case	\$50.00 per case
7-9	300 "	49.50 "	10-11	150 "	49.50 "
8-10	250 "	47.50 "	11-12	130 "	47.50 "

DELIVERY can be made at once from Denver, Chicago, London. From New York as the cars arrive (11 carloads now en route). Write for prices on Hardy varieties.

TERMS: 60 days net, less 2% cash 10 days from invoice date, cash with order from those who have not established credit with us.

CAN ALSO OFFER

DUTCH BULBS—Tulips and Narcissus in varieties. T. R. BEGONIA Bulbs in sizes and colors. VALLEY PIPS, U. S. Grown NARCISSUS, etc. Write for prices specifically stating requirements.

McHUTCHISON & CO., *The Import House,* 95 CHAMBERS ST.
NEW YORK



SIM'S YELLOW POLYANTHUS

Good either for Pots or
for Cutting

\$10 per 100
\$80 per 1000

WILLIAM SIM
CLIFTONDALE, - MASS.

HORTICULTURE

Vol. XXX

DECEMBER 6, 1919

No. 23

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.

BOXWOOD



In two grades, short sprays, small foliage (the bush variety) per 100 lbs. \$30.00.

Longer sprays and larger foliage (the tree variety) per 100 lbs. \$25.00

Both grades splendid quality, no surplus wood. Packed in bags of about 50 pounds each. Deliveries now for those who want to start their Christmas work.

Golden Retinispora and a full line of other desirable and attractive Christmas greens in our special Christmas Greens list. Write for same if it has not reached you.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.

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117 W. 28th St.

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1608-1620 Ludlow St.

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Franklin & St. Paul Sts.

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FERNS

THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we RECOMMEND IT MOST HIGHLY."

Strong plants, 2½-inch pots, \$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots, 7.50 per dozen, 50.00 per 100
Extra fine specimens: 6-inch, \$1.50 each; 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:

Each

Elegantissima, elegantissima compacta, and Muscosa, 2½-inch	\$0.35
Elegantissima and elegantissima compacta, 6-inch	.75
Muscosa, 6-inch	.75
Elegantissima and elegantissima compacta, 8-inch	2.00
Elegantissima and elegantissima compacta, 10-inch	4.00
Harrisii, 8-inch	3.00
Dwarf, Boston, 8-inch	2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown, N. Y.

FERNS

We have an excellent lot of pot grown Boston and Scottii Ferns ready for an immediate shipment before cold weather sets in. The following price will hold good during November. Shipped without pots.

Size	Doz.	100	1000
3 inch.....	\$1.00	\$ 8.00	\$ 75.00
4 inch.....	3.00	20.00	190.00
5 inch.....	4.50	35.00	325.00
8 inch, \$1.50 each.			

ALTERNANTHERAS, Alyssum, Double Giant and Dwarf, Begonias Gracilis and Vernon mixed colors, Coleus Standard sorts, Hardy English Ivy, Lantanas, assorted, Heilotrope, Lobelia, Crystal Palace Gem, Moonvines, 2-in. \$2.75 per 100.

Send for Catalogue Cash With Orders

R. Vincent, Jr., & Sons Co.
WHITE MARSH, MARYLAND

Henry H. Barrows

FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTTY

CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood

Best Crested Fern

3 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

CHRYSANTHEMUM SPECIALISTS

ELMER D. SMITH & CO.
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Snow Queen Canna

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The CONARD & JONES CO. WEST GROVE, PENN., U.S.A.

Robert Pyle, Pres. Antoine Wintner, Vice-Pres.
We are subscribers to the Nurserymen's Fund for Market Development

ORCHIDS

We grow and sell nothing but ORCHIDS. If you are in the market for this class of plants we respectfully solicit your inquiries and orders. Special lists on application.

LAGER & HURRELL, Summit, N.J.

HILL'S EVERGREENS

BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

THE D. HILL NURSERY CO.

Evergreen Specialists. Largest Growers in America
BOX 415, DUNDEE, ILL.

E. W. FENGAR

CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN

Reports generally as regards Thanksgiving Day business are to the effect that it was of record character. Never before was the volume so great. He would be dull indeed who would not give our Publicity Campaign credit for being a factor in the promotion of this condition. Our magazine advertising was timed just right, and millions of people saw the splendidly illustrated advertisements pertaining to Thanksgiving. The importance of flowers in the general observance of the day was emphasized in the text embodied in the advertisements—"Let flowers express your thankfulness for those friendships you hold dear. Send Thanksgiving Day greetings of flowers. Chrysanthemums were never so gorgeous, such glowing tokens of prosperity and peace as this year. In fact, all flowers seem to anticipate this season's wonderful message."

Flowers were not cheap—they were really much higher than usual at this season—yet the public bought, and liberally.

Just think of it! The three million copies of the magazines containing our publicity matter were, it is safe to assume, read by over ten millions of our people—all of the class we so much desire to reach. All who give thought to this publicity are ready to admit that it is wonderful work we are doing, with equally wonderful success resulting—and their prayer is that we may be able to keep it up.

The approaching holiday season is cared for in the same way, but on a somewhat larger scale. By means of colored pages and display advertisements the desirability of flowers and plants for Christmas presents is suggested. It is something of a new idea for the public. "Say Merry Xmas With Flowers" the advertisements read. "The Sweetest Gift of All." What a world of peace and good-will to all is expressed in that age-old phrase. Especially when you say it with flowers! For every heart thrills to the message of radiant blossoms. And their exquisite fragrance lingers as memory's chief charm. No thought so tender, but that flowers will add to its beauty. No gift so rare, but that flowers are more appropriate." Every advertisement carries a paragraph to remind readers that deliveries of flowers in distant cities and towns are easily made through the telegraphic delivery

Single and Double Hyacinths

Per 1000
Top Bulbs Named. \$80.00
First Size Bedding to Color. 45.00
Darwin Tulips, Named Sorts. 25.50
Single Early Tulips, Named Sorts. 22.50
Single Late Tulips, Named Sorts. 17.50

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system in vogue among florists generally.

Now, isn't work of this kind worthy of your support Mr. Non-subscriber? Can't you see that the more we accomplish the more you benefit? You may say to yourself "Well, conditions are better, and the business would have come anyway." Then on sober reflection you must come to the conclusion that you are merely "kidding" yourself. Our publicity is working for you, and to our advantage. Then why should you not contribute to the cost? You are not asked to give more than it is known you can afford. If every florist in the country were to contribute but five dollars, we could place our business where it ought to be. That slogan of ours, "Say it With Flowers" is invaluable. What if we were obliged to stop its promulgation? We should have something to mourn over. Your support is most urgently needed now—at this very time. Help us to keep the work going—work from which you are receiving such benefit, but pay for which you are grossly neglecting. What will you do—we are waiting for your reply?

JOHN YOUNG, Secy.

1170 Broadway, N. Y.

November 29, 1919.

BOSTON.

J. H. Playdon of Andover has been visiting in the city. He reports doing an extensive business in landscape work, as well as being very busy with florist's work.

The next annual convention of the New England Nurserymen's Association will be held in Boston Jan. 27 and 28. An interesting and valuable program is being prepared.

The Horticultural Club of Boston held its monthly meeting Wednesday evening at the Parker House. The tables were decorated by Thomas Roland of Nahant with cyclamens, and the speaker of the evening was Ernest H. Wilson, who gave an illustrated lecture on "Out-of-the-Way Places of the World."

A special exhibit of winter flowering begonias was held Tuesday and Wednesday at the Edwin S. Webster greenhouses at Chestnut Hill. Mr. Webster has a remarkable collection of these plants, including some fine new varieties. The opportunity to inspect the plants was taken advantage of by flower lovers.

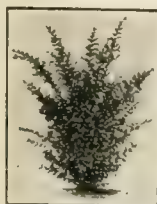
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Grand Maitre, porcelain blue 1600 \$7.50 \$60.00				NARCISSUS	
Perle Brillante Improved Grand Maitre 1600 7.50 60.00				GUERNSEY STOCK	
TULIPS				Blooms earlier than Holland Bulbs	
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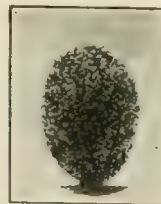
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THE NEW HYBRID

HARDY PRIVET

(L. Iboia x Ovalfolium)

Now sent out for the first time. Inquire for further information. One year field grown plants; \$5.00 each; Summer rooted, frame grown, \$3.00 each; Plants in storage for immediate shipment. The Elm City Nursery Co., WOODMONT NURSERIES, INC., New Haven, Conn. Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per \$1000.



Ibolium Privet
When Trimmed

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IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for future delivery.

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"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg Boston, Mass.

IF in need of RELIABLE NURSERY STOCK
that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**
Wholesale and Retail NORTH ABINGTON, MASS.

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NOW FOR THE HOLIDAY TRADE

Order plant stock while the supply is good and shipping can be done with less damage and expense.

Extra heavy **ADIANTUM HYBRIDUM**, 6-in., \$75.00 per 100.
Extra good **CHATELAIN BEGONIA**, 2½-in., \$7.00 per 100, \$65.00 per 1000.
3-in., \$12.00 per 100.
BIRD'S NEST FERN. Excellent stock, 2½-in., \$18.00 per 100; 3-in., \$27.50 per 100.

CARNATION CUTTINGS

Booking orders for December 15, and later. We are well prepared to supply in quantity and our growers have a high reputation for the quality of cuttings produced for years past. Have made special arrangements to supply **LADDIE, MORNING GLOW** and **PINK DELIGHT** from clean stock plants grown only for propagation purposes.

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	100	1000
ETHEL FISHER (Peter Fisher) scarlet.....	\$14.00	\$115.00
BERNICE (Howard) crimson	14.00	115.00
RUTH BAUR	12.00	100.00
LADDIE	10.00	90.00
MORNING GLOW	7.00	65.00
WHITE BENORA	7.00	65.00
PINK DELIGHT	7.00	60.00
HERALD	7.00	60.00
ROSALIA	7.00	60.00

Aviator, Belle Washburn, Doris, Benora, Rosette, Enchantress Supreme, White Enchantress, Beacon, Ward, Good Cheer, White Perfection, White Wonder, Miss Theo—\$6.00 per 100; \$50.00 per 1000. Matchless, Nancy, Alice and Enchantress—\$5.00 per 100; \$40.00 per 1000.

FERNS for fern dishes. As- 100 1000
sortment of best sorts,
2½-in. \$6.00 \$55.00
3-in. 12.00

KENTIA Belmoreana. Strong Doz. 100
2½-in. \$1.50 \$12.00
3-in., \$25.00 per 100. 4-in., 50c. each

IVY, English. 3-in., \$8.00 per 100.

CINERARIA

Selected strain, 2½-in., \$7.00 per 100; \$65.00 per 1000.

WINTER FLOWERING FORGET-ME-NOT. Best Boston Market Forcing Strain. \$7.00 per 100, \$65.00 per 1000.

SNAPDRAGON. Ready now. Nelrose, Silver Pink, Enchantress, Keystone, Phelps White and Yellow, 2½-in., \$6.00 per 100, \$55.00 per 1000.

BEGONIA MRS. M. A. PATTEN. Dark sport of Chateleine. Buy now and have them ready for Xmas. 2½-in., \$10.00 per 100.

Crotons

Nice 2½-in. plants. Get your stock now and be ready for your mixed pans and hampers for the holidays. A good assortment of highly colored sorts both broad and narrow leaf types. \$35.00 per 100.

Let us quote you on Ramblers and Baby Ramblers. One year old plants, excellent for growing on. We have the best sorts and in quantity.

10,000 Hydrangeas. Otaksa and best French sorts. 3-inch, \$12 per 100; 6-inch, heavy, \$40 per 100; 7,000 2½-inch at \$7 per 100, \$65 per 1,000.

Pelargonium Easter Greeting, also mixed, including four best sorts, 2½-inch, \$12 per 100. 500 White Baby Rambler Catherine Ziemet, forcing stock, immediate shipment, \$30 per 100.

Cash or satisfactory trade references.

No C. O. D. Shipments.

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15 Cedar St., Watertown, P. O.
BOSTON, MASS.



BEGONIA. A good offer in Melior and Cincinnati. Strong, bushy plants from leaf cuttings. 3½-in. ready to report in to 5-in. at 50c. each. 2½-in. from top cuttings, strong plants, 25c. each.

CYCLAMEN. Blood red, salmon, crimson, white carmine eye, 4-in. ready for 5-in., 50c. Big, fancy plants in 5-in. pots at \$1.35 each.



SIM'S YELLOW POLYANTHUS

THE BEST ON THE MARKET
Winter flowering clumps ready now.
\$8.00 per 100 - - - \$75 per 1000

Asparagus Plumosus Seed
Massachusetts greenhouse grown,
1000 \$3.00; 5000 \$13.50.

GYPSOPHILA SEED

(Nicholson's Forcing Strain)

Earliest and Best
¼ oz., \$50c.; ½ oz., 85c.; 1 oz., \$1.50

TWO NEW FERNS

NEPHROLEPIS MACAWII

A Winner

2½ in., \$20 per 100.

THE VICTORY FERN

(Nephrolepis Victoria)

Bronze Medal at Detroit.

	Per Doz.	Per 100
2¼ in. pots.....	\$3.00	\$20.00
3½ in. pots.....	7.50	20.00

OTAHEITE ORANGES, for growing on, 2½-in., \$20.00 per 100.
LATANIA Borbonica, Fan Leaf Palm, 3-in., \$30.00 per 100.

ARECA Lutescens, 2½-in., single plants, \$15.00 per 100; 2½-in., made up three plants to the pot, \$20.00 per 100.

ASPARAGUS Plumosus, seed- 100 1000
lings \$8.00
2½-in. \$5.00 45.00
3-in. 10.00
Sprengeri Seedlings..... 7.00
Sprengeri, 2½-in. 5.00 45.00
3-in. 10.00

CHRISTMAS JOY PEPPER. Heavy, 4½-in. pots, \$30.00 per 100. Well set with Berries and colored. A Bargain.

Dracaenas

Godsefiana, Sanderiana, Lord Wolseley, Kellieriana and Terminalis. They are highly colored and just right for mixed pans and hampers for the holidays. You will save money by getting them now. Strong, 2½-in. pot plants, \$25.00 per 100; 3-in., select stock, \$40.00 per 100.

Gladiolus Bulbs

First Size

Brenchleyensis, Fire King, Independence, Klondike, \$30.00 per 1000.
America, Augusta, Halley, Mrs. Francis King, Delice (1¼), \$35.00 per 1000.
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Mrs. Frank Pendleton, Niagara, Peace, Mrs. Watt (1¼), \$50.00 per 1000.
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Schwabens, \$70.00 per 1000.
New Primulinus Miranda, large flowers, 3 to 4 flower spikes per bulb. Canary yellow color, light carmine markings. \$40.00 per 1000.
XXX Sp. Mixture, \$30.00 per 1000.
First Grade Mixture, \$25.00 per 1000.
FOR PROFIT BUY PRIMULINUS HYBRIDS. WE HAVE THEM IN QUANTITY AND OF BEST SELECTION. Don't forget Primulinus Hybrids average two to three blooms per bulb and are quick sellers in the market. Fancy, \$35.00 per 1000. Regular, \$20.00 per 1000.

HORTICULTURE

Vol. XXX

DECEMBER 6, 1919

No. 23

THE TALK OF THE TRADE

One of the promising new varieties in carnations to be introduced this year is Ruth Baur, being sent out by Baur & Steinkamp, Indianapolis, Ind. The prominent carnation men all seem to have this variety very much in mind and it gives promise of turning out to be a good commercial variety. The parentage is Northport, crossed with Pink Delight. The introducers claim the same strong growth of Northport, but in other respects resembles its parent. This of course will mean long, stiff stems, a good calyx, a good keeper, and if we are correctly informed, it is larger than Pink Delight. In color, it is very much like Winsor, although I think it resembles Gloriosa. We certainly have need for a good variety in this color.

Anyone interested in carnations may always enjoy himself by calling on Samuel Goddard at Framingham, Mass. Very few of the standard commercial varieties are grown here, nearly everything being seedlings on trial or some variety that is not on the market. For instance, Mr. Goddard has a variety called Endurance, about the color of Winsor, and it is a beauty. It has not been sent out yet, but may be sometime in the future, and I believe that it will be a profitable sort for anyone.

A carnation to be heard from later without question is Sunshine, a beautiful clear yellow, to be put out by E. A. Strout, Biddeford, Maine, in the Spring of 1921. Mr. Goddard also has a very fine white. It is absolutely clear, a wonderful grower, does not split, and of medium size. It is not small by any means but could not be called a fancy as to size. It should be a good one for the average grower. This white will be heard from quite often this season as we feel sure it will be shown well on the exhibition table. It is from F. Dorner & Sons Co. and is being tried out by Mr. Goddard, this being the second year he has grown it.

There are also several others of promise on trial, such as a cerise about the color of Mrs. C. W. Ward, also a good crimson and a good scarlet. The scarlet in particular seems to be very free with a beautiful habit of growth.

An anemone chrysanthemum shown on the market this year which is very promising is called Sunshine. I don't know where it came from originally, but think it was from Elmer D. Smith. It is deserving of more attention than it has received, and anyone wanting a good yellow anemone for November 1st to Thanksgiving cutting will do well to buy this sort. It will be offered this season and it will be hard to beat it.

Max Schling is nothing if not original. His store, his handling of plants, and his advertising all suggest a mind which does not run in common grooves. One of the most interesting of his recent advertisements is reproduced herewith. It appeared in the New York papers

and caused no little comment. It is pretty safe to say that it sold flowers, too, which after all is the most important point.

Now that Thanksgiving is over and Christmas is approaching, the question of greens will be of great importance to many branches of the trade. Inquiry through the different sources of supply for green goods would indicate that laurel is in good quality and in normal supply. Holly will average well up in price but there are strong hopes that it will be of good grade as to berries and color. In fact, it is likely to be berried better than usual.

Ground Pine is coming in slowly at this time, which means that it is later than usual. As in many other lines, the labor shortage is said to be the cause for the trouble.

Never have we been through a bet-

**We
Send
Flowers
By
Wire!**

Wherever He or She may be,—
Los Angeles or San Antonio,—
Winnipeg or Vancouver,— within
2 hours from the receipt of your wishes
in this office, the Flowers you have
chosen will be There!—and the recipient
will be radiating thanks to you!

Just a 20th Century way of doing things, that's all!
In every city we have Bonded Representatives who on
receipt of wired instructions from us, carry out your wishes
to the letter! And the cost?—a mere trifle!

Max Schling's Flowers Phone PA-7241
783 FIFTH AVE. & 60th St.
Say It With Flowers

Max Schling's Advertisement as it Appeared in Several Papers

Society of American Florists and Ornamental Horticulturists

Take out life membership **NOW**, when the cost is only \$25.00. After December 31st the cost will be \$50.00. These fees are for members in good standing only.

If you are not already a member, remit \$30.00, which will provide for your initiation and promote you to the Life Membership list. After the date named annual membership will cost \$5.00 per year. A Life Membership relieves you of further payments, except the 50 cents annual subscription for the Society's "Journal."

Over 600 members have taken Life Membership certificates this year.

We issue to Life Members a handsomely engrossed certificate, suitably framed, the display of which is recommended.

Cheques should be made payable to the Society of American Florists, and sent to

1170 Broadway, New York

JOHN YOUNG, Secretary.

ter season for fall berries of every kind. They have been plentiful for some time past and will continue to be so through the Christmas season. This is especially true of red berries.

Boxwood seems to be even with the past number of years as to supply, quality and price, but at this time it is too early to predict what will be the outlook regarding mistletoe.

Hemlock is said to be plentiful, as is also Southern wild smilax, but the latter is holding a little above the average market price for the past few years, all of which seems to indicate that the Christmas market on greens will be very satisfactory to the average florist, and I think there will be a large quantity used with good results to the dealers, retailers and trade in general. It is advisable, nevertheless, for everyone needing greens of any kind to order early and be on the safe side.

So far as the writer knows, Henry Penn, of Boston, has the first florist's establishment in which the employees have formed a mutual benefit association. This organization which is known as the Penn Cooperative Association is only a few weeks old, but it already includes every member of the staff, about twenty in number.

The organization was formed primarily for benefit purposes, but it also has a social character which will prove, no doubt, of great value in helping the members to get better acquainted and to work more in harmony. The dues are only twenty-five cents, but it will not take long to accumulate a fund of considerable size. This fund can be drawn upon at any time if a member needs financial assistance because of sickness in the home or any other reason. A loan will be made in such cases without interest and be repaid as conditions warrant.

The officers of the Association are made up entirely of employees and are as follows:

President, Maurice Clancy.
Secretary, Miss Susan Duwan.
Treasurer, Miss Katherine Lyons.

The social possibilities of the new organization were made apparent a few nights ago when the male members were invited to the home of Jacob Harris, in Brookline, where they were given a dinner, which was prepared entirely by Mr. Harris himself, and which was pronounced a masterpiece worthy the efforts of a hotel chef. Music and other forms of entertainment made the evening one to be long remembered.

Apart from the benefit which the employees of the store may get from such an organization as the one described, it is conceivable that the morale of any store where an organization of this sort is in existence will be improved and the employers as well as the help be better off.

NEW YORK FLORISTS' CLUB.

The New York Florists' Club will hold its next meeting Monday night when officers will be elected. The candidates for president are A. M. Henshaw, president of the Henshaw Floral Co., Inc., and I. S. Hendrickson, of John Lewis Childs, Flowerfield, L. I. Roman J. Irwin is a candidate for vice-president. John G. Esler has declined to run. John Young, the present secretary, and Edward C. Vick, are the nominees for secretary. William Kather has declined to run for treasurer, which leaves the field to W. C. Rickard, Jr., now holding the office. The nominees for trustees are A. T. Bunyard, Emil Schloss, Thomas Booth De Forest and Max Schling, three to be elected.

Six new plant houses have been erected by Anton Schulthies at College Point, New York.

FLOWERS UNDER GLASS.

There was an interesting and important article last week concerning the sowing of fern spores in order to propagate the best of the florists' varieties. It is well to bear in mind that it takes from ten to twelve months to grow most of the commercial varieties to a size suitable for selling in pots. I wish also to emphasize the use of sterilized compost, the use of which does much to prevent damping off, or at least what passes as that trouble, but which is caused, I understand, by a minute fungus. Small growers will get good enough results by baking the soil in the furnace, or even by soaking it with boiling water. Make your compost of loam, leaf mold, peat and sand in equal parts, and give the soil a thorough soaking, and then allow the water to drain off before you put in the spores.

Probably there were never so many growers handling begonias as this season. These plants are bound to be in heavy demand and should prove profitable. Although such new kinds as Elatior and Optima are proving wonderfully good begonias, the more widely distributed Lorraine will still have a big call this year, although it must be admitted, the difficulty which many amateurs have with the plants which they have bought does not always increase the reputation of the florist who sells it. In growing this plant it is necessary to think a year ahead, as propagation for next year's stock should have begun now. It is true that this work can be put off until later, but early propagated stock is always the most satisfactory. You can get good results from the well matured leaves of vigorous plants, taking those which are free from spots of any kind. You should trim away the stubby end of the leaf stalk to a point about half an inch below the leaf and then insert in sand up to the base of the leaf itself. Be sure that this sand is firmed well. Sunshine must be excluded and light sprinklings should be frequent. You should have rooted stock in about two months. One grower advises covering the little plants with sashes when the house is being ventilated to ward off draughts.

The Cyclamen is certainly the plant of the hour this season, and probably its popularity will last for many years, as it is one of the most satisfactory of all house plants for holiday sales. It is well to remember, though, that you can't get Cyclamens that will last well or satisfy the customer if they have

William W. Edgar Co.
FLORISTS
WAVERLEY, MASS.
"THE HOUSE OF SERVICE"
Call Belmont 600
SEASONABLE FLOWERING PLANTS
Cyclamen, Begonias, Primulas, Chrysanthemums, Peppers, Jer. Cherries, Paper Whites, etc.
Visitors Always Welcome

CANNAS
A large stock of several varieties. PRICES RIGHT. Let us book your order now for shipment at any time.
PARKER BROS. NURSERY CO.
FAYETTEVILLE - - ARKANSAS

FAMOUS WABAN ROSES
Grown and sold exclusively by
WABAN ROSE CONSERVATORIES
Roses at wholesale; shipped by express anywhere.
Kinds: Russell, Hadley, Ophelia, Premier, Thayer, Brilliant, Killarney, White Killarney. Contracts given for minimum deliveries daily or weekly, with protection in Holiday Seasons.
Write or telephone **BOSTON OFFICE, 15 BEACON STREET**
Mention this Paper **HAYMARKET 800**

been forced in unusual heat in order to get them ready for Christmas. Good growers like to keep a temperature of about 50 degrees at night. Then there is a good development of foliage and the flowers are formed naturally. If you must push along the plants a little keep them at a temperature of from 55 to 60 at night, and give them full sun close to the glass in the daytime. You will need to water frequently from now until the plants are sold, and it will pay you to sponge the leaves if you find any sign of insect pests. If you can feed the plants moderately with liquid manure, you will be gratified at the results, for such feeding stimulates them to throw up their flowers in good shape.

WINTER COURSE IN FLORICULTURE.

The Winter Course at the Massachusetts Agricultural College begins on December 30 and continues for a period of ten weeks. The course offered in floriculture is designed to furnish those who have not the time to devote to a longer course with the theoretical and practical considerations essential to success in floriculture.

tural work. The course covers as thoroughly as time will permit those aspects of the work which are of especial interest to the commercial florist. Some of the topics considered are greenhouse construction, greenhouse management, and methods used in growing important commercial crops. A portion of the course will also be devoted to a consideration of gardening and garden flowers. Special trips are taken to study floricultural establishments in the State. Courses in soils, plant diseases and insect pests accompany the work in floriculture.

Further information concerning the course may be obtained by writing for an announcement to the Department of Floriculture or the Short Course Office, Massachusetts Agricultural College, Amherst, Mass.

AMERICAN SEED TRADE ASSOCIATION

At a recent meeting of the American Seed Trade Association in Chicago, it was voted to hold the next convention June 22, 23, 24, 1920, at Milwaukee, Wis. A tentative program was arranged and preliminary plans made for the convention.

HORTICULTURE

Established by William J. Stewart in 1904

VOL. XXX

DECEMBER 6, 1919

NO. 23

PUBLISHED WEEKLY BY
HORTICULTURE PUBLISHING COMPANY
 78 Devonshire Street, Boston, Mass.

EDWARD I. FARRINGTON, Editor.

Telephone Fort Hill 3684

ADVERTISING RATES:

Per inch, 30 inches to page..... \$1.25

Discount on Contracts for consecutive insertions, as follows:

One month (4 times), 5 per cent.; three months (13 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.

Page and half page space, not consecutive, rates on application.

SUBSCRIPTION RATES:

One Year, in advance, \$1.00; To Foreign Countries, \$2.00; To Canada, \$1.50.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1879.

Whenever flower growers or professional gardeners get together these days one is pretty certain to hear remarks about the indifference shown by the young men in their employ to the advancement of the trade or profession in which they are engaged. Complaint is made that these young men lack ambition, except as it relates to the accumulation of money. They seldom open one of the trade papers, and spend no time in reading books relating to their line of work. All this is pointed out as being in sharp contrast to conditions which prevailed when the present business heads or estate superintendents were beginners. In those days, apparently, every young man was keen to learn all that he could about the business and found his greatest delight in the handling of flowers and plants. Unfortunately there is reason to believe that many of these strictures are founded on fact. One is tempted to believe at times that ambition is truly dead.

The question comes, though, whether it isn't possible to bring about a different situation. Just how it is to be done is a matter for careful consideration. Possibly it would be worth while for an employer to give a year's subscription to one or more of the trade or horticultural papers to each of his men. It is conceivable that occasional staff meetings might be held at which some of the articles in these papers might be taken up and discussed, and possibly criticized by those who are most familiar with the subject treated. It might pay to have a small working library at hand, and when a question comes up to have the books consulted. The writer knows of one state which has a special room for the employees which is kept warm and where a large number of reference books are at hand for consultation. Many times it becomes possible for a retailer or more particularly a grower to bring up some point for discussion, doing it in such an indirect manner that he would have his men debating it without suspecting that it was introduced deliberately.

We notice that there is a growing tendency among

florists' associations to open their membership to employees. This would seem to be a step in the right direction, although it is obvious that it might at the same time limit the range of discussion and perhaps interfere with the full value of the association. Nevertheless, much good comes from getting the men together and showing them that sociability and business discussions can go hand in hand. Certainly employees should be encouraged to join horticultural societies and gardeners' clubs such as exist in most cities. There are scores of young men in every section who have no such affiliations. If they had, it would be better for them and better for all concerned. Certainly it is not enough that employers should simply criticize the rising generation because it does not show the same spirit as was found years ago. Conditions have changed all along the line. The right way is to meet the situation as it exists and try to find a remedy.

Living Christmas trees

It seems as though there might be an excellent opportunity for florists to sell a large number of spruces from one to two feet high this year, advertising them as live Christmas trees. Last year the American Forestry Co. made a special advertising campaign and sold many trees of this kind, delivering them by parcel post within five hundred miles of Boston. This was a good plan, but after all it is through the florists that this line of work should be exploited. No doubt florists could sell many trees of this kind by a little advertising on their own part. In the advertising mentioned some of the points brought out were that the trees could be kept in pots indoors during Christmas and planted outdoors later. That they were excellent for shut-ins and that they would please older people as well as children. The advantages of baby Christmas trees in the home, schools and churches were dwelt upon and the fact brought out that they also might be used to advantage in hotels and stores, where of course they are very decorative. It was very good advertising except for the fact that the word Xmas was used constantly instead of Christmas. We think that this was a mistake from several points of view. We believe that Xmas has no legitimate place in our holiday language and that the word Christmas should be employed invariably in the advertising of florists.

The readiness with which the public will take up with a suggestion of this kind is shown by a recent edition of the New York Evening Post, which contained a long article in the Home Makers Department under the title "Why Not a Living Tree This Year?" The writer went on to deprecate the cutting of balsams and firs for Christmas use and advocated living trees in tubs or pots as a substitute. It was pointed out that a good sized tree can be shipped by express, planted in a tub, used as a family Christmas tree and then after suitable care during the winter set out permanently to continue its beneficent work.

There is no doubt that other articles of this kind would be used in the papers of other cities if the information were given the editors, and in this way a demand might be created at practically no expense, although it would be a courtesy to present the editor or writer with one of the trees so that he might see for himself its beauty and its ornamental value. It is reaching out after trade in this manner which will help to build up the florists' business and to increase the range of the plants handled.

GETTING READY FOR CHRISTMAS

Deliveries of all sorts of supplies are slow. Better get in your requirements of paper, boxes, twines of different sorts, tissue paper, waxpaper, newspapers. Do you remember that last year you said you were going to get a few nice light boxes made to work between the greenhouse and store? Did you get them?

Make arrangements for extra delivery now. Monday, Tuesday, and Wednesday, Dec. 22nd, 23rd and 24th, are the days you will want them. Route your parcels north and south, east and west.

Have you got all the baskets you need, especially a size to sell at \$7 to \$10.00? More corsages will be sold this year. Look over your shields and ribbon and see that you have a goodly supply.

Many florists try to make nice plants out of pot covers, but the best way is to grow a nice plant. Then a neat pot cover of suitable color will be in good taste. A good Christmas red and a moss green are the most suitable colors for pot covers.

Try to have your extra help of intelligent calibre. So often our best customers are served by our poorest clerks. Mistakes ensue and very often the loss of a customer. Have your best help serve your best patrons.

Have a good stock of everything ready. The best quality sells the best.

There will be more decorating this year, so don't be afraid to stock greens and wreaths. Work hard and good luck to you.—*Canadian Florist*.

BOSTON FLORISTS' ASSOCIATION.

There was a large attendance at the monthly meeting of the Boston Florists' Association Tuesday night, and many matters were discussed, particularly those concerning the relations of the growers and the retailers. It is probable that the club will be divided into committees representing the different branches of the trade. It was voted to do all possible to get publicity when the song "Say It With Flowers" is sung at Keiths in a few weeks. The theatre is to be decorated and special bouquets are to be given the singer at each performance. The tables were decorated by Harold Ryan with excellent vases of Chrysanthemum Mistletoe, Giant White Stevia of remarkable quality and ferns. Louis J. Reuter showed a fine specimen of the Macawii fern and W. D. Howard showed the new Bernice Carnation, as usual very well grown.

CHRISTMAS PLANTS

Cyclamen, \$1.50 and up; Begonias, 75c to \$2 each; Poinsettias, single, 50c, 75c and \$1 each; pans, made up with Ferns and Peppers, \$1.50 to \$4 each.

FERNS, Scottii, Verona, Boston and Roosevelt, 50c to \$2 each.

FRANK EDGAR,

Waverley, Mass.

ANNOUNCEMENT

**The New Crimson
Carnation for 1920**

BERNICE

**Orders filled in strict
rotation for December
and January delivery**

STOCK LIMITED

WRITE FOR DESCRIPTIVE CIRCULAR

**PRICE: { \$ 14.00 per 100
115.00 per 1000**

W. D. HOWARD,

Milford, Mass.

PHILADELPHIA

Charles Thess, late with T. Nelson Geiger at 13th and Walnut streets, is now manager of the Ross Flower Store at 60th and Market streets. Mr. Thess is a man of marked ability and has come rapidly to the front of late years in the retail florist field. His many friends are certain that he will be fully equal to the enlarged responsibilities entrusted to him in his new venture and follow him with best wishes.

Recent visitors to Philadelphia include Wm. F. Gude and his daughter, Miss Adelaide Gude, Washington, D. C.

Howard M. Earl sailed from New York Nov. 28 for Europe as per schedule already reported.

J. Otto Thilow advises that he reached Honolulu on his trip to the antipodes and spent 24 hours in that delightful city. He has had to cut out New Zealand from his itinerary on account of shipping difficulties. He expects to visit all the Australian points laid out for him.

OBITUARY

Mrs. Nathan P. Stauffer.

Anna L. Pennock, wife of Dr. Nathan P. Stauffer, passed away November 27th at her residence, 32 Violet Lane, Lansdowne near Philadelphia. Mrs. Stauffer was a daughter of Abram L. Pennock and is survived by her husband and three children. Samuel S. Pennock is an elder brother

of the deceased and the sympathy of the trade is extended to him and the rest of the family—many of whom are either in or are closely connected with the florist business.

James M. Ricketson

James M. Ricketson, for many years a well known florist of New Bedford, Mass., is dead at the age of 80 years. Mr. and Mrs. Ricketson were married by Rev. William Barker at Dartmouth in 1866 and three years ago celebrated their 50th milestone of married life surrounded by relatives and friends at the home of Mrs. Ricketson's sister, Mrs. David H. Mitchell on Shawmut avenue. They lived in New Bedford for over 50 years.

Mr. Ricketson was for 18 years employed as gardener by many New Bedford families. He later entered the florist business from which he retired about eight years ago.

CHRYSANTHEMUM SOCIETY OF AMERICA.

Report of New Chrysanthemums submitted to the Committee appointed by the Chrysanthemum Society of America at New York.

Exhibited by R. Plebany & Son, Irvington, N. J. Sport of Mrs. E. A. Seidewitz, Jap. inc., daybreak pink, commercial scale, 86 points.

Exhibited at Chicago by H. W. Rie-
man Sons, Indianapolis, Ind. Pearl,
white Pompon, scale for Pompon
varieties 97 points

Penn
The Florist

"The Telegraph Florist"

Member of Florists' Telegraph Delivery

124 TREMONT ST.
BOSTON

H. F. A. LANGE

Worcester, Mass.

Delivers to all Points in New
England

150,000 Square Feet of Glass

Member Florists' Telegraph Delivery
Association

WORCESTER, MASS.

Randall's Flower Shop

HARRY I. RANDALL, Proprietor.
Member Florists' Telegraph Delivery

Providence, Rhode Island

Johnston Brothers

LEADING FLORISTS

38 Dorrance Street

Member Florists' Telegraph Delivery

Quality and Reliability
WARBURTON

FALL RIVER, MASS.

Deliveries of Flowers and Plants
in FALL RIVER and contiguous
territory.

The Beacon Florist
Beacon Street, **BOSTON**
Near Tremont

J. EISMAN, Manager. 14 years head
decorator and designer for Penn's.
Prompt, Efficient Service Guaranteed.

Zinn
The Florist
Park St., Boston

Flowers by Telegraph

Leading Retail Florists Listed by
Towns for Ready Reference. Orders
transferred by telegram or otherwise
to any of the firms whose address is
here given will be promptly and prop-
erly filled and delivered.

Beverly, Mass.—Beverly Flower Shop.
Boston—Penn the Florist, 124 Tremont St.
Boston—Zinn the Florist, Park St.

Brockton, Mass.—Belmont Flower Shop.
Boston, Mass.—The Beacon Florist,
Beacon St.

Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.
Buffalo, N. Y.—S. A. Anderson, 440 Main
St.

Cambridge, Mass.—Harold A. Ryan.
Cleveland, O.—J. M. Gasser Co., Euclid
Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th
St.

Cleveland, O.—The Smith & Fetters Co.,
735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643
Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New
Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017
Grand Ave.

Lawrence, Mass.—A. H. Wagland.

Malden, Mass.—J. Walsh & Son.

New York—David Clarke's Sons, 2139-
2141 Broadway.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
son Co.

Taunton, Mass.—Hall the Florist.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—H. F. A. Lange.

Worcester, Mass.—Randall's Flower Shop,
22 Pearl St.

CAMBRIDGE, MASS.

581 MT. AUBURN STREET

HAROLD A. RYAN, Inc. Member
F. T. D.

BROCKTON, MASS.

Belmont Flower Shop

Member
F. T. D.

HIGH GRADE PLANTS

For Retail Stores a Specialty

ASK FOR LIST

THOMAS ROLAND, Nahant, Mass.

LAWRENCE - - MASS.

A. H. WAGLAND

We Cover

LAWRENCE, METHUEN, ANDOVER,
NORTH ANDOVER, SALEM, N. H.
and contiguous Territory
Member of F. T. D.

BEVERLY, MASS.

BEVERLY FLOWER SHOP Member
F. T. D.

MALDEN, MASS.

J. WALSH & SON Members
F. T. D.

HALL, The Florist

Telephone 1422

4 Main Street, **TAUNTON, MASS.**

National Florist for Taunton and Vicinity



GUDE BROS. CO.
WASHINGTON, D. C.

Member Florists Telegraph Delivery

FLOWERS The Best at
The Lowest



"I SERVE"

The Largest Popular Priced House in
Philadelphia

F. M. ROSS

Send orders to

136 So. 52nd Street, Philadelphia.
Other Stores

13 So. 60th St., 212 E. Girard Avenue

PHILADELPHIA

Member Florists' Telegraph Delivery
Orders from all except members of
the F. T. D. must be accompanied by
remittance.

FOR

KANSAS CITY

Transfer Your Orders to

SAMUEL MURRAY

1017 Grand Avenue

Member Florists' Telegraph Delivery

IN THE

National Capitol

At your service to deliver Flowers or Designs on Order by Telegraph or otherwise. Prompt Reliable Service.

GEORGE H. COOKE

Connecticut Ave. and L St.
WASHINGTON, D. C.

Max Schling
Flowers

Schling Service
Nothing Better

785 Fifth Avenue, New York City

"Says It With Flowers"

DARDS FLOWER SERVICE

has spent GUARANTEED SATISFACTION for nearly FIFTY YEARS.

Regular European sailings now established. Let us fill your orders for Steamer Flower Baskets, Corsages and Artistic Boxes of Cut Flowers.

DARDS, Inc., Florist,

341 Madison Ave., New York

S. A. ANDERSON

440 Main St., Buffalo, N. Y.

ANDERSON service means fresh, sturdy Stock and prompt deliveries in BUFFALO, LOCKPORT, NIAGARA FALLS and WESTERN NEW YORK.

Member Florists' Telegraph Delivery

HESS & SWOBODA

FLORISTS

Telephone 1501 and L 1530

1415 Farnum St.

OMAHA, NEB.

THE KNOBLE BROTHERS CO.

Flowers and Nursery Products

Member Florists' Telegraph Delivery

We are well equipped to handle your orders.

1836 W. 25th Street CLEVELAND, O.

THE SMITH & FETTERS CO.

735 Euclid Avenue

CLEVELAND, OHIO

Flowers of Every Kind in Season

PHILADELPHIA

CHAS. H. GRAKELOW F. T. D.

Everything in Flowers

Broad Street at Cumberland

The Park Floral Co.

B. E. GILLIS, President.
E. P. NEIMAN, Secretary.

Member Florists' Telegraph Delivery

DENVER, COLORADO

JOHN BREITMEYER'S

SONS

Cor. Broadway and Gratiot Aves.
DETROIT, MICH.

**Artistic Designs - . . .
High Grade Cut Blooms**

We cover all Michigan points and good sections of Ohio, Indiana and Canada. Members Florists' Telegraph Delivery Association.

A BILLBOARD CRITIC.

Wyomissing, Pa., Nov. 25, 1919.

Dear Sir:—

As a landscape architect I ask permission to express some opinions and ideas about the billboards "Say it with Flowers." I have read and followed with much interest the discussion in HORTICULTURE on the subject, and my opinions and ideas are based solely upon what I have gathered there and, perhaps, in one other trade paper. I am very much inclined to agree with what I take to be the general gist of Mr. McFarland's communications.

In the November 22nd number there is a picture (which I am quite sure I have seen in other numbers) that would lead almost anyone to infer that these billboards were to be placed in positions exactly like so many others where the scenery is defaced by billboards, and that "Say it with Flowers" would soon be keeping company with billboards telling about soap, liver pills, paint, soups, cathartics, beans, and so on. Surely, in the picture in question the billboard serves only to disfigure what appears to be a fairly pleasant, quiet country scene; not to enhance it. Anyone engaged to beautify the scene shown would without hesitation request the removal of the billboard immediately.

The printed matter that goes with this picture strengthens and confirms the impression made by the picture.

CLEVELAND

A. GRAHAM & SON

5523 Euclid Ave.

Will take good care of your orders

Members of F. T. D. Association.

DAVID CLARKE'S SONS

Deliver orders from any part of the country to

New York City

Write or Telegraph

2139-2141 Broadway, New York

Telephone 1552-1553 Columbus

KOTTMILLER, Florist

426 Madison Ave. and 49th St., New York. Also Vanderbilt Hotel

Telephone, Murray Hill 783

Out-of-town Orders Solicited. Location Central. Personal Attention.

Member F. T. D. Asso.

G. E. M. STUMPP

761 Fifth Ave.

NEW YORK CITY

Member Florists' Telegraph Delivery Asso.

WILSON **BROOKLYN**

Main Store
1 and 5 Greene Ave. **NEW YORK**

Member Florists' Telegraph Delivery Asso.

Phones, Prospect 6840-6841-6842

DELIVERIES IN NEW YORK, BROOKLYN and LONG ISLAND

THE J. M. GASSER COMPANY,

CLEVELAND

Euclid Avenue

The Far-Famed Flowers of

TORONTO

Delivered on mail or telegraph order for any occasion, in any part of the Dominion.

JOHN H. DUNLOP

8-10 West Adelaide St. - TORONTO, ONT.

When writing to advertisers kindly mention HORTICULTURE

THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

Trade Prices on Application

R. & J. FARQUHAR & CO.
BOSTON, MASS.

JUST OUT

BOLGIANO'S 1919 SUMMER AND FALL
CATALOG OF "BIG CROP" SEEDS

Special Prices for
Florists and Market Gardeners.
Write for a copy at once—it will save you
money.

J. BOLGIANO & SON
BALTIMORE, MARYLAND.

STUMPP & WALTER CO.

Seeds and Bulbs

30-32 Barclay Street
NEW YORK CITY

SEEDS, BULBS, PLANTS

JOSEPH BRECK & SONS, CORP.

47-54 North Market Street
BOSTON, MASS.

SEEDS AND BULBS

Goddington's

128 Chambers St., N. Y. City

BOBBINK & ATKINS

NURSEYMEN, FLORISTS, PLANTERS
RUTHERFORD, NEW JERSEY

We are subscribers to the Nurserymen's
Fund for Market Development, also "Say
It With Flowers" Publicity Campaign.

GARDEN SEED

BET, CARROT, PARSNIP, RADISH and
GARDEN PEA SEED in variety; also other
items of the short crop of this past season
as well as a full line of Garden Seeds, will
be quoted you upon application to

S. D. WOODRUFF & SONS
82 Dey St., NEW YORK and ORANGE CONN.

BURNETT BROS. Seeds, Bulbs, Plants Etc.

92 Chambers St., New York
Write for our Illustrated Catalog

MICHELL'S CHRISTMAS GREENS

PLEASE NOTE—All Christmas Greens
shipped at buyer's risk of delay or
spoilage in transit, when forwarded by
Express or by Freight and Boat. We
recommend shipping by Express. All
prices subject to change without notice.

HOLLY (LOOSE)

Per ¼ case...
Per ½ case... Per full case...\$7.00

HOLLY WREATHS

	25	50	100
12 inch	\$6.00	\$11.00	\$20.00
14 inch	7.00	13.50	26.00
18 inch	11.00	20.00	38.00

LAUREL, EXTRA HEAVY

In 25 yard coils, made on double rope.
25 yards... \$3.25 250 yards... \$25.00
50 yards... 6.00 1000 yards... 90.00
100 yards... 11.00

MISTLETOE (MEXICAN)

1 lb.....\$.50	10 lbs..... \$4.50
5 lbs..... 2.40	25 lbs..... 10.00

BOXWOOD (CUT)

In 50 lb. boxes only; \$11.25 per 50 lbs.

LYCOPODIUM (LOOSE)

25 lbs..... \$4.00	100 lbs..... \$14.00
50 lbs..... 7.25	

LYCOPODIUM WREATHING

In 10 yard pieces

10 yards... \$1.10	250 yards... \$22.00
50 yards... 5.00	1000 yards... 85.00
100 yards... 9.00	

Also all Seasonable Seeds, Bulbs and
Supplies. **SEND FOR OUR HANDY
FLOWER SEED ORDER SHEET**, if
you do not receive a copy.

P. S. New customers who may not be rated in Dun's or Bradstreet's will kindly send money orders or trade references with order, to avoid delays in shipment of Christmas Greens. If you have an account with us, wire your orders.

**MICHELL'S SEED HOUSE, 518 Market Street
Philadelphia**

Maybe I have an entirely wrong idea as to how these billboards are to be used. However, in that case I can plead misinformation in extenuation. It seems to me that no other inferences than the ones I have drawn in the above could be drawn in the circumstances. Am I right? Mr. McFarland seems to have about the same idea.

I assume that the main purpose of the scheme is to enable the florists to make more money—which they certainly are entitled to. But, I take it, there has been at least an undercurrent of feeling that a certain amount of missionary work would result at the same time among the public as to the refining and spiritual effect of flowers. If "public highways, land bordering railroad tracks, tops of buildings, vacant lots," the country over, from Maine to California and from Mexico to the Arctic Circle (there are florists in Alaska), are to be made to cry aloud with these billboards, I am afraid that missionary results along the lines of greater refinement and higher spirituality will not amount to much. I feel justified, on account of the profession that I am engaged in.

In having fairly definite ideas on this phase of the matter. As to the money that will be made as a result of the use of these billboards, I have only hazy notions, but I can't help wondering just what the net result will be in the long run.

I am not so sure that these billboards, even if limited in use in the way that Mr. Pierson speaks of, that is, on the fronts of establishments, will enhance the attractiveness of a well kept florist establishment.

I don't know anything about advertising, but it seems to me that the slogan "Say it with Flowers" is a fine one, and that there are hundreds of conceivable ways in which it can be used to bring in the business, yet in keeping with good taste.

Very truly yours,

HANS J. KOEHLER.

COMING EXHIBITIONS.

March 24-28, 1920, Boston, Mass.—
Exhibition of orchids and other plants of the Massachusetts Horticultural Society at Horticultural Hall. William T. Rich, secretary, Horticultural Hall, Boston

RHODODENDRONS FROM SEED.

Whether the plant embargo is just or not, the American nurserymen should do their best to develop material at hand. I have in mind particularly a class of plants which have been neglected in this country. I refer to Rhododendrons and their allies. When we say Rhododendrons we do not refer merely to the evergreen kinds represented mostly by hybrids imported from Europe. We refer also to the deciduous kinds which are generally in nurserymen's catalogues as Azaleas; and these include besides several species of American and Asiatic origin also the Ghent and Mollis hybrids.

The best known of the American deciduous species are R. (A) Vaseyi, R. Calendulacea, R. Arborescens, R. nudiflorum, R. canescens and R. viscosum, all of which are well worth growing; and of late years we have added an evergreen species of much beauty, R. carolinianum.

Besides these we have the Manchurian R. mucronulatum, a handsome bright pink early blooming species. R. Schlippenbackii, a showy light pink flowering kind, will soon be available in quantity. R. japonicum, a species which has entered into the make up of the "Mollis" hybrids, is handsomer than any of the hybrids. Also R. Kaempferi; this is becoming well known. The flowers are orange red to pink in color and a mass of them in bloom is strikingly beautiful.

One of the reasons why nurserymen have not gone into raising Rhododendrons from seeds, I think, is that they have been considered difficult to raise. Given proper conditions, they are as easy to raise as Petunias, and I would much rather be set to raising them than Begonias and Gloxinias and such like greenhouse plants. Indeed of late, we have been raising all small seeds in the same way we do Rhododendrons. We commence about the middle of February, using flats about one foot square. We figure to have so many flats take in the width of our greenhouse bench. Peaty soil is best, but half and half sifted loam and leaf soil is very good, so long as it is free from lime. The important thing is to furnish a proper germinating medium. After the flats are filled and pressed they are surfaced with a layer of sifted sphagnum. This is obtained by drying sphagnum and rubbing it through a fine meshed sieve. The flats are wet down with a fine spray and the seeds sown on the surface. They are placed in an intermediate house, 55 degrees nights, and kept sprinkled daily. The seeds, most of them, will be up in a month and be ready to prick off in another. When pricked off

HOLIDAY DECORATIONS

Holly, XXX Quality Holly Wreaths
Mistletoe Cut Boxwood
Prince's Pine Japanese Roping
Laurel Wreathing Immortelles

RAFFIA—Fresh shipment just arrived

Write for Special Christmas Circular

SPRING BULBS—Gladiolus, Tuberoses, Caladiums. Ask for prices

Chicago VAUGHAN'S SEED STORE New York

THIS SEASON'S NEW ROSES

PILGRIM CRUSADER PREMIER RUSSELL HADLEY

We are receiving daily shipments of these new Roses, in large quantities, and can furnish same on short notice.

We have a large stock at all times of choice CARNATIONS, CHRYSANTHEMUMS, ORCHIDS, VALLEY and AMERICAN BEAUTIES.

Tel., Main 6267 **WELCH BROS. CO.** 262 DEVONSHIRE STREET
5948 BOSTON, MASS.

Wollrath & Sons

Plant Specialists

POINSETTIA, single and made up pans. Quality unsurpassed

CYCLAMEN — BEGONIAS

Christmas Stock of all Kinds in Fancy Grades
Come and Inspect Our Stock. Never in Better Condition

139 Beaver Street WALTHAM, MASS.

they are returned to the same house, where they stay until placed outdoors to harden in September. Shading will be necessary about the middle of March.

T. D. H.

A BOOK ON LIME.

Of late years constantly increasing interest in the use of lime has been shown among horticulturists of all sorts, due to an increased realization of the value of lime as an aid to productivity. At the same time lime has not always been used with an intelligent appreciation of its nature or action on the soil, perhaps because literature, except that issued by commercial concerns, has not been readily obtained. The little volume just put out by Alvah Atgee, Secretary of the New Jersey State Department of Agriculture, is of particular interest. It is called "The Right Use of Lime in Soil Improvement" and goes exhaustively into the subject. The book is one which should prove of no little practical help to everyone who makes his living from the soil. A number of good illustrations add to its value.

"The Right Use of Lime" by Alvah Atgee, published by Orange Judd Co., New York, price \$1.25.

THE National Nurseryman

The oldest and best established journal for nurserymen. Circulation among the trade only. Published monthly. Subscription price \$1.50 per year. Foreign subscriptions, \$2.00 per year. In advance. Sample copy free upon application from those in the trade enclosing their business card.

National Nurseryman Pub. Co., Inc.
HATBORO, PA.

DESTROYED BY HAIL

Last Summer a florist who had imagined he was outside of the hail section lost upwards of 50,000 square feet of glass by hail with no insurance to recompense him.

He is now a member of the Florists' Hail Association of America.

Profit by experience and join the Association now. Address

JOHN G. ESLER, Secretary
Saddle River New Jersey

When writing to advertisers kindly mention HORTICULTURE

Rambling Observations of a Roving Gardener

In the November number of the Garden Magazine, Mr. Ernest H. Wilson has a long article on the Ginkgo tree in which he makes mention of the fine specimen growing on Boston Common, to which place it was removed some years ago from the garden of Mr. Gardner Green. The tree was forty feet tall and four feet in girth of trunk at that time, which was in the year 1838. People sometimes seem to think that the moving of large trees is something new, but apparently feats similar to those of today were carried out many years ago. Undoubtedly the most impressive planting of Ginkgos in this country is at Washington, where there is a broad avenue lined with Ginkgos.

Two years ago a low Box hedge with which I am familiar was killed out to a large extent by the extreme cold weather. Since then it has been restored fairly well, and this winter it is being protected by short spruce branches. The effect is very pleasing, and will be even more so when the snow falls. The short branches are symmetrically placed so that they themselves resemble a low hedge. There is a good suggestion here for people who need to use a protective covering for winter, but at the same time wish to avoid the unpleasant suggestion of a littered and untidy garden during the winter months.

It would be well if people would realize more generally the necessity of giving their rhododendrons an abundance of water in the fall. This is one of the secrets of carrying the plants through the winter in good shape. One other point which would save much loss is the placing of rhododendrons so that they will be cut off in late winter from the rays of the sun in the middle of the day. In a great many instances rhododendrons are killed simply because the warmth of the sun starts them into growth too early. A severe cold snap comes along later and finds them unprepared for its rigors. In the Arnold Arboretum the rhododendrons are planted at the base of Hemlock Hill where the trees afford natural shade and doubtless this is one of the reasons why they thrive to such a remarkable degree.

Rather late this fall I received and set out a dozen plants of the new On-



Showing the Fine Growth of the La France Raspberry

tario raspberry which is being put out by the station at Geneva, New York. If I am not mistaken the stock has not been wholly distributed as yet, and plants can be obtained at a small price. I do not know as yet what the value of this raspberry is going to be. Some of the new kinds do not prove to be as satisfactory as the early claims for them would warrant. This may be an exception.

Certainly the La France fall bearing raspberry, about which much has been heard this fall, lays claim to consideration by all gardeners who have a fondness for raspberries or who wish to produce extra fine fruit. The La France berry has created astonish-

ment because of its extra large size, and approval of its flavor has followed sampling the fruit. The remarkable vigor of the plants is shown by the accompanying illustration. These plants are remarkably thrifty and seem to be equally hardy. I do not anticipate that there will be any necessity for laying them down, even in the vicinity of Boston. Raspberries of this type have come to stay. They are appreciated in the fall, especially late when most other berries have gone out of the market. People used to say that they did not care for fruit out of season, but statements of that kind are seldom heard now. The average man or woman likes a dish of raspberries whenever they can be obtained.

DREER'S "Riverton Special" Plant Tubs



No.	Diam.	Ea.	Doz.	100
10	20 in.	\$3.25	\$37.50	\$287.50
20	18 in.	2.75	30.00	237.50
30	16 in.	2.25	26.00	195.00
40	14 in.	1.90	22.00	168.75
50	12 in.	1.50	15.00	110.00
60	10 in.	.95	10.50	77.50
70	8 in.	.75	8.25	62.50

The Riverton Tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric-welded hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER, Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.



CYPRESS GREENHOUSE STOCK

PECKY CYPRESS STOCK
HOT BED SASH

Ask for Circular D and Prices

THE A. T. STEARNS LUMBER COMPANY
NEPONSET, BOSTON



The Meyer Florists' Green Thread is different from any other make. Every spool contains 2 ounces of actual thread, 16 ounces to a pound. See that you get the Meyer Florists' Green Thread and you will get the very best thread in the world. Don't take any substitutes.

Manufactured by

John C. Meyer Thread Co.
BOSTON, MASS. Mills at Lowell, Mass.

For All Flowers in Season Call on
THE LEO NIESSEN CO.
1201 Race St. Philadelphia, Pa.

EDWARD REID
WHOLESALE FLORIST
1619-21 Ranstead St., Philadelphia, Pa.
CHOICE BEAUTIES, ORCHIDS, VALLEY, ROSES
and all Seasonable Varieties of Cut Flowers

Wired Toothpicks
Manufactured by
W. J. COWEE, Berlin N. Y.
10,000....\$2.50 50,000....\$11.00 Sample free.
For Sale by Dealers

GEORGE B. HART
WHOLESALE FLORIST
24 Stone St., Rochester, N. Y.



A Card This Size
Costs only 90c. per Week
on Yearly Order
It would keep your name and your
specialty before the whole trade.
A half-inch card costs only 45c. per
week on yearly order.

GENERAL NEWS NOTES

Derrick, the Florist of Cooperstown, N. Y., has opened a branch store in Oneonta, according to an advertisement in the Oneonta Star. A temporary location has been secured at 230 Main street.

Douglas Brown of Cincinnati, for several years official reporter of the S. A. F. Convention, has passed away, after an illness of some weeks.

Harry Crawford has joined the staff of Robt. Craig in Philadelphia.

The A. L. Randall Co. of Chicago has opened an office and show room at 1718 Washington Ave. St. Louis. H. G. Hall, formerly of Chicago, is in charge.

Minot H. Carter, who has been in service over seas, has returned to Wakefield, Mass., and will again engage in the florists business. His headquarters are now at his home, 791 Main street, but he expects to open a store soon.

The Colonial Flower Shop is a new establishment at Troy, N. Y., Joseph P. Gettings is the manager, and the location is 452 Fulton street.

The New Haven, Conn., Horticultural Society will elect officers at a meeting Dec. 9.

The annual meeting of the ornamental Growers' Association will be held in New York, Jan. 14 and 15.

The Hartford, Conn., Florist Club has voted to admit employees as members. The meetings will be held at Barnes' restaurant.

The Flower Emporium is a new store at Pittsfield, Mass. Daniel F. Hickey is the owner.

C. B. Ordway has opened a handsome new Florists Shop in the Havens Theatre Block at Utica, N. Y. A special feature is the mammoth "flower refrigerator," which takes up practically the entire width of the store.

A heavy motor truck crashed through the glass-pane roof of one of W. W. Tailby's greenhouses on Linden street, Wellesley, Mass., and then ploughed through beds of flowers and plants until it came to a stop on striking and knocking down the apparatus used to heat the greenhouse and others adjoining it.

Dennis T. Connor of the Lord & Burnham Co. has moved with his family from Atlantic City to corner of Hoffman avenue and 58th street, Philadelphia. This location is easily reached by trolley and is within a two minute walk of Angora station on the Pennsy.

H. E. FROMENT
Wholesale Commission Florist
Choice Cut Flowers
New Address, 143 West 28th St., NEW YORK
Telephones: 2200, 2201, Madison Square.

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Wholesale Florist
107 W. 28th Street, NEW YORK
Telephone 5335, Farragut
Call and inspect the Best Establishment
in the Wholesale Flower District.

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CHOICE CUT FLOWERS
133 West 28th Street, New York
Telephone—4633-5532 Madison Square

E. G. HILL CO.
Wholesale Florists
RICHMOND, IND.
Please mention Horticulture when writing.

REED & KELLER
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Florists' Supplies
We manufacture all our
Metal Designs, Baskets, Wire Work & Novelties
and are dealers in
Decorative Glassware, Growers and
Florists' Requisites

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Fresh Cut Decorative Evergreens
Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
Catalog of Greens and Florists' Supplies
119 W. 28th St., - NEW YORK

WILLIAM H. KUEBLER
Brooklyn's Foremost and Best
WHOLESALE COMMISSION HOUSE
A First Class Market for CUT FLOWERS
Willoughby St. Brooklyn

WE WANT MORE SHIPPERS
We have a numerous clientele of New York City buyers and the demand exceeds our supply. This is especially true of Roses. We have every facility and abundant means and best returns are assured for stock consigned to us.
Address Your Shipments to
UNITED CUT FLOWER CO., INC.
111 W. 28th St., New York
D. J. Pappas, Pres.

FRANK J. REYNOLDS CO.
Wholesale Florists
Boston Co-operative Flower Market
260 DEVONSHIRE STREET
BOSTON, MASS.

ANOTHER DRASTIC RULING OF FEDERAL HORTICULTURAL BOARD.

Dear Sir:

The enclosed copies of letters give another decision of the Federal Horticultural Board, this time with regard to getting a few surplus cases moved from Canada into the United States to relieve the shortage here—the shortage being largely due to government restrictions. What is particularly noticeable is the absolute disregard of national or individual commercial interests in making these decisions.

Yours truly

McHUTCHISON & Co.

The McHutchison Company's Letter.

November 19, 1919.

The Federal Horticultural Board,
New York City.

Gentlemen:—Following the visit of our Mr. C. B. Knickman, we state the situation in writing and request that you lay the facts before Washington and advise us of decision as soon as possible. The facts are these:

Owing to the sinking of the S. S. Yoten Maru off Yokohama, which was bringing our earliest large consignment of Lily Bulbs to New York via Panama Canal route, and the holding back of 1,000 cases in Seattle due to lack of refrigerator cars, we are short of Lily Bulbs here, and the eight or ten carloads now en route cannot arrive in time.

You can understand that this will be a big loss to us. But on the other hand we have a small surplus in London, Ontario, Canada, which we would like to bring to New York by express, but your regulations prevent this being done—unless you are willing to strain a point to meet the situation.

The Canadian shipment went through in bond from Yokohama to London via Vancouver, and while we have not yet received shipping documents from Japan we assume that no certificate of inspection is attached to the documents, nor health certificates or sterilization certificates on the cases—as these are not required by Canadian laws. This of course, is merely conjecture on our part, but we must assume there are none. What we would like to bring from London are the following cases:

50 cases	Lillum Giganteum	7 to 9 in.
10 "	"	8 to 10 in.
25 "	"	9 to 10 in.

As the soil in which these are packed comes from the side of a mountain taken many feet from the surface, there can be no danger of insect pests or plant diseases being introduced through this medium; but we are will-

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

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Telephones, Fort Hill, 3469 and 3135

**MICHIGAN CUT FLOWER
EXCHANGE, Inc.**

WHOLESALE COMMISSION FLORISTS

Consignment, Delivered

Hardy Fancy Fern Our Specialty

264 RANDOLPH ST., DETROIT, MICH.

The House for Quality and Service

ZECH & MANN

*We are Wholesale Florists Doing
a Strictly Wholesale Business*

30 East Randolph Street, CHICAGO

ing to confine shipments to points around New York so that you can arrange for the disposition of the soil used as packing material if you so desire.

Kindly take up this matter promptly with Washington, for we expect to receive at least 1,500 cases within three weeks, so that there would be no advantage in getting this small lot from Canada unless we could get them in by express ahead of the freight shipments en route. Thanking you in advance for your decision, we remain,

Yours truly,

(Signed) McHUTCHISON & Co.

The Federal Horticultural Board's
Reply.

Nov. 25, 1919.

McHutchinson & Co.,

New York, N. Y.

Gentlemen:—Reference is made in

your letter of the 19th instant in regard to shipments of Lily Bulbs from Japan which have been routed to a Canadian point and which you surmise to have packed in unsterilized soil because the shipper was under the impression that they were intended for the Canadian market and not for that of the United States. In reply to your query as to whether the Board will allow such bulbs to be shipped into the United States, I have to advise you that the Board considers it impossible to permit the entry of such bulbs into this country and that strict compliance with the soil sterilization requirements must be insisted upon. Doubtless you will be able to dispose of the bulbs in Canada. Very truly yours,

(signed) HARRY B. SHAW.

Pathological Inspector in Charge.

THE BOILER OF Unequalled Fuel Economy

Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

\$,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1918.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

THE MARKET.

The market has remained remarkably strong considering the season. To be sure flowers have not sold as readily at times as might be wished, but there has been little disposition to cut prices. Carnations are in normal supply and the quality is very good indeed. Roses are coming in well enough to satisfy the trade. Chrysanthemums are gradually going out, although there are enough to meet the demand. Wall flowers are beginning to come in, but are not so good in quality as they will be a little later. Some sweet peas of unusual quality reached the Boston market this week, coming from R. P. Peterson of Framingham. The sudden cold weather has hurt business a little. Evidently it caught some growers unawares, for flowers come into the market in a frozen condition.

BEAUTIFUL NAMES FOR ROSES.

It seems to me that English rose growers choose their names on a family principle. They wish to compliment a friend, a customer, an illustrious man; and the result is that when



Price,
\$10.00

G. H. 3

Plant Insurance at \$10

WHAT would happen if your night man fell asleep some night in zero weather? What if you should oversleep, or a cold wave hit your greenhouse when your heat is at the minimum? It would mean ruin to your plants—possibly ruin to you. There have been many such cases.

But not if you are equipped with the STANDARD THERMOSTAT. The Standard Thermostat protects you from just such dangers. It will ring a bell at your bedside when danger is near.

"I have one of your greenhouse thermostats I have used 3 years. It has proved so satisfactory I want another for my new houses."—John Sharper, Oxon Hill, Md., Jan. 6, 1919.

Get one today, \$10.00

(G. H. 4, same as G. H. 3, only under lock and key, \$15.00.)

STANDARD THERMOMETER CO.
LESTER STREET BOSTON, MASS.

this person has an ugly name the rose has an ugly name, too. It is true that a rose by any other name would smell as sweet; and yet it is not all true. It is what the rose grower might call a "semi-double" truth; for there is much in a name, and roses should have names worthy of them.

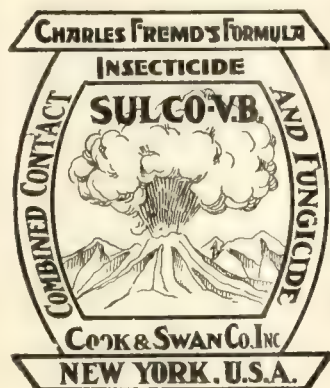
Most often it happens that the name

is ugly, as I hold many of the new names to be. A rose should have a name as immortal as itself. The Earl of Penzance knew this when he called his sweetbriars after Scott's heroines. Shakespeare, so far as England is concerned, might give names to all our new roses.—From "One Day to Another," by E. V. Lucas.

WHOLESALE FLOWER MARKETS—Trade Prices Per 100—To Dealers Only

	BOSTON Dec. 1	NEW YORK Dec. 1	PHILA. Dec. 1	CINC'I. Dec. 1	CHICAGO Dec. 1	PITTSBURG Dec. 24	BUFFALO Dec. 24
Roses							
Am. Beauty	12.00 to 75.00	3.00 to 50.00	20.00 to 75.00	10.00 to 50.00	12.00 to 50.00	6.00 to 60.00	5.00 to 60.00
Hadi y	12.00 to 40.00	3.00 to 25.00	8.00 to 15.00	8.00 to 25.00	4.00 to 15.00	..... to	8.00 to 15.00
Hoosier Beauty	12.00 to 4.00	3.00 to 6.00	6.00 to 20.00	5.00 to 15.00	4.00 to 15.00	..... to	6.00 to 20.00
Killarney	10.00 to 40.00	2.00 to 6.00	6.00 to 10.00	5.00 to 12.00	4.00 to 12.00	4.00 to 15.00	6.00 to 15.00
White Killarney	14.00 to 3.00	2.00 to 6.00	..... to	5.00 to 12.00	4.00 to 12.00	4.00 to 15.00	6.00 to 15.00
Mrs. Aaron W. rd.	12.00 to 35.00	1.00 to 8.00	6.00 to 8.00	5.00 to 10.00	4.00 to 12.00	4.00 to 12.00	6.00 to 8.00
Mrs. Chas. Ru sell	12.00 to 3.00	3.00 to 20.00	15.00 to 30.00	6.00 to 25.00	6.00 to 30.00	6.00 to 30.00	8.00 to 15.00
Mr. Geo. Sawyer	12.00 to 40.00	4.00 to 6.00	..... to	6.00 to 20.00	4.00 to 12.00	6.00 to 15.00	8.00 to 15.00
Co umbia	10.00 to 30.00	3.00 to 20.00	2.00 to 30.00	3.00 to 35.00	6.00 to 20.00	6.00 to 20.00	10.00 to 25.00
Myland	10.00 to 20.00	2.00 to 6.00	6.00 to 10.00	6.00 to 2.00	4.00 to 12.00	4.00 to 12.00	6.00 to 15.00
Ophelia	12.00 to 3.00	2.00 to 10.00	6.00 to 15.00	6.00 to 25.00	5.00 to 12.00	4.00 to 12.00	6.00 to 20.00
Adiantum	.75 to 1.60	.75 to 1.00	1.00 to 1.50	1.00 to 1.50	..... to .....	..... to 2.00	2.00 to 3.00
Asparagus plum 100 bchs	.75 to .50	.15 to .25	..... to	25.00 to 50.00	5.00 to 15.00	40.00 to 50.00	35.00 to 50.00
Asparagus spren	.25 to .50	..... to .....	..... to	2.00 to 35.00	25.00 to 50.00	60.00 to 75.00	3.00 to 50.00
Pom Pons	.25 to 1.25	..... to .....	..... to	35.00 to 75.00	..... to	25.00 to 50.00	50 to 1.00
Bonaffon	1.00 to 5.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Calendules	1.50 to 5.00	4.00 to 15.00	4.00 to 5.00	3.00 to 4.00	2.00 to 4.00	..... to 6.00	3.00 to 4.00
Carnations	6.00 to 8.00	1.00 to 3.00	6.00 to 10.00	5.00 to 6.00	3.00 to 5.00	4.00 to 6.00	4.00 to 5.00
Chrysanthemums	.50 to 6.00	4.00 to 35.00	15.00 to 40.00	5.00 to 4.00	15.00 to 4.00	3.00 to 4.00	8.00 to 40.00
Calla	2.00 to 4.00	..... to .....	..... to .....	..... to 25.00	.25 to .30	..... to 25.00	15.00 to 25.00
Ferns, Hardy	1.50 to 2.00	..... to	20.00 to 30.00	3.00 to 35.00	.15 to .20	..... to 2.50	..... to 2.50
Ga ax leaves	..... to 2.00	15.00 to 20.00	15.00 to 2.00	15.00 to 20.00	..... to .....	..... to 2.00	..... to 1.50
Marguerite	.75 to 3.00	..... to .....	..... to .....	..... to	125.00 to 150.00	..... to 2.00	1.00 to 2.50
Narcissus	2.00 to 4.00	.50 to 1.50	..... to	5.00 to 6.00	..... to	4.00 to 6.00	6.00 to
Orchids Cattleyas	75.00 to 150.00	..... to	150.00 to 2.00	..... to 200.00	..... to	125.00 to 150.00	100.00 to 125.00
Orchids C. priediums	..... to .75	..... to .....	..... to	15.00 to 20.00	20.00 to 25.00	..... to .....	..... to
Sweet Peas	2.00 to 4.00	1.00 to 1.50	2.00 to 4.00	..... to 2.00	2.00 to 3.00	..... to	1.00 to 2.00
Snap Dragon	.50 to 2.00	.50 to 8.00	6.00 to 10.00	10.00 to 15.00 to to 8.00	6.00 to 8.00
Violets	2.00 to 3.00	.25 to 75	1.00 to 2.00	.50 to 1.00	50.00 to .75 to 2.00	2.00 to 3.00

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A combined contact insecticide and fungicide of known reliability

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From your dealer or direct—go to your dealer first

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NEW YORK CITY

141 Milk Street
BOSTON, MASS.
Geo. H. Frazier, Mgr.

TAKING CHRISTMAS ORDERS.

Have proper order sheets printed. Do not use pieces of paper of any size and form, or a piece off the ribbon bolt. Some use a book in which to enter them, but I think the order sheet the best. You will find them much more convenient than the book for sorting and filing. Write only one order on a sheet. They can be numbered and filed according to numbers or alphabetically. I find alphabetical filing much better than according to number. A charge order can be filed alphabetically under the name of the person to whom it is charged, and a paid order under the name of the person to whom it is going. Have a file for each day of the week and sort your orders thus:

Express—Flowers.

Express—Plants.

Town—Flowers.

Town—Plants.

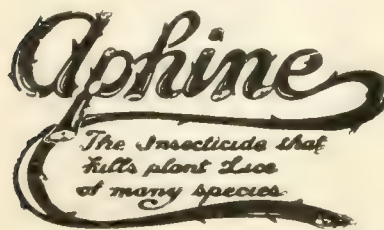
If a customer comes in to add her card to an order placed three weeks previously, you will have no trouble in finding the order. If you have a new clerk, he has only to ask her if her order was flowers or plants, charged or paid. With this information, it is a simple matter for him to find the order.

No doubt you will put aside sold plants and baskets a week before Christmas. Label these with a large tag, giving the delivery day, the one to whom it is to be sent and the name of the one who ordered it, if charged. Place all the plants, etc., for the same day's delivery together. When the time comes to wrap up these plants, the information on the label will tell you where the order is. Now if you have done what I suggested about writing cards and address labels when the order was received, all you have to do, is detach these from the order, attach to the plant or basket and give to the packer. You waste no time the night before Christmas Eve writing cards and labels. Your packers do not handle the orders, and there is little possibility of an order being lost.

This system can also be applied to your cut flower orders. Your regular clerk picks out the flowers and gives them, with card and label, to the packers. In this way, your regular clerks, knowing the customers, gives them the stock and service to which they are accustomed.

I find the best plan is to divide the city or town into districts and have a motor delivery car for each section. Select a place in the store or greenhouse where all parcels are gathered and then sorted for their respective districts.

—Canadian Florist.



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.

Quart, \$1.00; Gallon, \$2.50.

FUNGINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.

Quart, \$1.00; Gallon, \$2.50.

VERMINE

For eel worms, angle worms and other worms working in the soil.

Quart, \$1.00; Gallon, \$3.00.

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Aphine Manufacturing Co.

MADISON, N. J.



Save your plants and trees. Just the thing for greenhouse and outdoor use. Destroys Mealy Bug, Brown and White Scale, Thrips, Red Spider, Black and Green Fly, Mites, Aunts, etc., without injury to plants and without odor. Used according to directions, our standard Insecticide will prevent ravages on your crops by insects.

Non-poisonous and harmless to user and plant. Leading Seedsmen and Florists have used it with wonderful results.

Destroys Lice in Poultry Houses, Fleas on Dogs and all Domestic Pets. Excellent as a wash for dogs and other animals. Relieves mange. Dilute with water 30 to 50 parts.

1/2 Pint, 30c; Pint, 50c; Quart, 90c;

1/2 Gallon, \$1.50; Gallon, \$2.50; 5 Gallon Can, \$10.00; 10 Gallon Can, \$20.00.

Direction on package.

LEMON OIL COMPANY

Dept. S. 420 W. Lexington St., Baltimore, Md

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NEW YORK



World's Oldest and Largest
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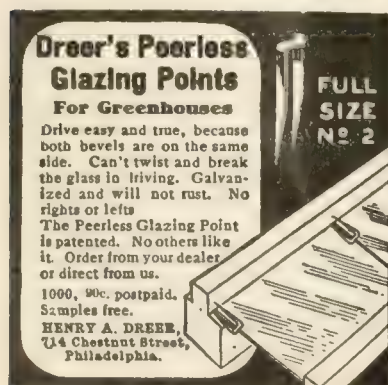
FLOWER POTS

WHY?

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Greenhouse and Garden Fertilizers. Write us for detailed information and prices on

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USE IT NOW

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Mastica is elastic and tenacious, admits of expansion and contraction. Putty becomes hard and brittle. Broken glass more easily removed without breaking of other glass as occurs with hard putty. Last longer than putty. Easy to apply.

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CONCENTRATED PULVERIZED
MANURE

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34 Union Stock Yard, Chicago

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Does Kill Them. Ask for Prices.
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ASPARAGUS

Asparagus sprengeri, 3-inch pot size, good bushy plants, \$13.00 per 100 out of pots. Cash please. J. L. CHAPMAN, Florist, Beverly Farms, Mass.

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Asparagus plumosus seedling: \$1.00 per 100; \$6.00 per 1,000. ALFRED M. CAMPBELL, Strafford, Pa.

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Split carnations quickly, easily and cheaply mended. Pillsbury's Carnation Staple, 1000 for 35c.; 3000 for \$1.00 postpaid. I. L. PILLSBURY, Galesburg, Ill.

DAHLIAS

Peony Dahlias Mrs. Frederick Grinnell. \$10.00 per clump. Cash with order. JOHN P. ROONEY, New Bedford, Mass.

New Peony Dahlia—John Wanamaker. Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

GOLD FISH

Gold fish, aquarium plants, snails, castles, globes, aquarium, fish goods, nets, etc., wholesale. FRANKLIN BARRETT, Breeder, 4815 D. St., Olney, Philadelphia, Pa. Large breeding pairs for sale. Send for price list.

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PERCO-BRAND INSECTICIDES.
A Standardized, Complete and Inexpensive Line. Ask for Prices.
PERFECTION CHEMICAL CO., INC.
151 H Washington St., Flushing, N. Y.

KENTIAS

Kentia Belmorenan—Averaging 3 and 4 leaves, good strong plants out of 2 1/4-inch pots at \$15 per 100—larger quantities on application. J. H. FEISSER, 7-11-741 Hamilton Ave., North Bergen, N. J.

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Live Sphagnum Moss, orchid peat and orchid baskets always on hand. LAGER & HURRELL, Summit, N. J.

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Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect: also Climbing Roses. J. H. TROY, Mount Hissarlik Nursery, New Rochelle, N. Y.

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F.O.B. Denver (Colo.)	6-8	7-9	8-10	9-10	10-11	F.O.B. London (Canada)	7-9	8-10	9-10 10-11

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6-8	400 per case	\$42.00 per case	9-10	200 per case	\$50.00 per case
7-9	300 "	49.50 "	10-11	150 "	49.50 "
8-10	250 "	47.50 "	11-12	130 "	47.50 "

DELIVERY can be made at once from Denver, Chicago, London. From New York as the cars arrive (11 carloads now en route). Write for prices on Hardy varieties.

TERMS: 60 days net, less 2% cash 10 days from invoice date, cash with order from those who have not established credit with us.

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DUTCH BULBS—Tulips and Narcissus in varieties. **T. R. BEGONIA** Bulbs in sizes and colors. U. S. Grown **NARCISSUS**, etc. Write for prices specifically stating requirements.

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EVERY greenhouse man who has ever had a leaky or cracked boiler knows what a lot of time, trouble and money that means.

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"X"—the wonderful Boiler Liquid—will do \$200 worth of repair work for \$10; and do it in about half an hour.

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The surplus "X" that remains in the water automatically stops all new leaks due to expansion or other causes. In this way "X" Liquid makes the boiler (and in a hot water system, the entire system) absolutely **LEAKPROOF**.

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The chemical composition of "X" Liquid is such that it absorbs all free oxygen in the water. This prevents the metal from rusting. "X" Liquid also prevents the lime and other scale-forming elements in the water from depositing layers of scales on the

walls. "X" keeps the boiler Rustproof and Scaleproof. "X" does not evaporate or lose its strength with age. When new water is added it combines itself with this water and performs its functions again and again.

"X" contains no cement, powder or other injurious ingredients. It cannot clog the air valves; in fact, it makes frequent repacking of valves unnecessary.

A Strong Guarantee

You take no chance in using "X" Liquid. It is unconditionally guaranteed to make good. If it fails you get a new can—or your money back.

But your greatest guarantee of the value of "X" Liquid is the fact that it is used, sold and recommended by 99 per cent of the manufacturers of boilers and radiators. It is used by the United States Government.

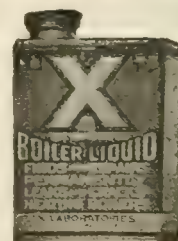
If your boiler cracks or leaks this winter you don't have to worry about your greenery—if you keep a can of "X" Liquid handy. Just get a can of "X" and do the repair job yourself.

1 Quart \$6 in the U. S. A.

2 Quarts \$10 in the U. S. A.

Get "X" Boiler Liquid from your steamfitter—or we will ship direct, postage prepaid, on receipt of price.

"X" Laboratories, 33 W. 45th St. New York City



HORTICULTURE

Vol. XXX

DECEMBER 13, 1919

No. 24

NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

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MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

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Our growers, and they are the best in the country, will be in with splendid crops of Sweet Peas, all shades. Probable price \$3.00 and \$4.00 per 100.

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\$4.00 per doz., \$25.00 per 100.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.

Xmas Cut Flower List will be ready December 13th.

Green List Ready Now.

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THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we **RECOMMEND IT MOST HIGHLY.**"

Strong plants, 2½-inch pots.....\$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots..... 7.50 per dozen, 50.00 per 100
Extra fine specimens: 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:		Each
Elegantissima, elegantissima compacta, 3½-inch	.....	\$0.35
Elegantissima and elegantissima compacta, 6-inch	.....	.75
Muscosa, 5-inch	.....	.75
Elegantissima and elegantissima compacta, 8-inch	.....	2.00
Elegantissima and elegantissima compacta, 10-inch	.....	4.00
Harrisii, 8-inch	.....	3.00
Dwarf, Boston, 8-inch	.....	2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown, N. Y.

FERNS

We have on hand for immediate shipment a splendid lot of Pot Grown Ferns all extra good value for the money. Shipped without pots

	Size	Doz.	100	1000
Bostons	4-in.	\$3.00	\$20.00	\$190.00
"	5-in.	4.50	35.00	325.00
"	6-in.	6.50	50.00	....
"	8-in.	18.00	....	....
Scottii	3-in.	1.00	8.00	75.00
"	4-in.	3.00	20.00	190.00
"	5-in.	4.50	35.00	325.00
Teddy, Jr.	5-in.	4.50	35.00	....
Cordetta Compacta	4-in.	3.00	20.00	....
"	5-in.	4.50	35.00	....
Crytonum (Holly Ferns)	4-in.	3.00	20.00	....
Table Ferns, assorted	3-in.	1.00	6.00	....
"	4-in.	3.00	20.00	....

Alternantheras; Alyssum, double Giant and Dwarf; Begonias, Gracilis and Vernon; Hardy English Ivy; Lantanas, assorted; Heliotrope; Lobelia, Crystal Palace Gem; Moonvines, 2-in. \$2.75 per 100, 3-in. \$3.75 per 100.

Send for Catalogue Cash With Orders

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Nephrolepis Norwood

Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

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Small, medium and large sizes supplied
Price list now ready

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S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN.

The publicity being given to the Von Tilzer song, "Say it With Flowers" is very gratifying to our Committees. The song is a pronounced "hit," and besides the presentations of it in the big theatres of our leading cities arranged for by its publishers it is being presented in minor cities by artists outside of the "headliner" circle, who quickly take hold of anything which becomes a success in the theatres of the larger circuits. A correspondent who happened to be in the city of Lowell, Mass., last week, writes us that its rendition in a theatre there came as a surprise to the florists, one of whom immediately had flowers sent in to the singer, who used them to advantage. Any assistance the florists can render in the presentation of the song is sure to result to their advantage locally. This week Buffalo has a presentation of it at Shea's Theatre, by Miss Emma Stevens, a well-known vocalist. New Orleans is also to have it featured for several weeks in a "Revue" at one of its leading places of entertainment. It is quite likely that it will be heard in all cities in the country, and, in addition, it is expected that it will shortly be offered in phonograph record form. All this without any expense to our Publicity Fund—a testimonial to the value of our slogan

The Slogan Billboards.

Paul E. Weiss, of the Weiss-Myer Co., Growers, Maywood, Ill., who is installing four of these signs, or "Advertising Bulletins," as it has been suggested we should call them, writes: "Every grower of flowers in this country, large or small, can afford and should buy at least one sign. Personally, I believe this idea of billboards to be a great advertising medium, and we growers are bound to get good results." The manufacturers of signs, in Fort Wayne, Ind., are making prompt shipment of all signs ordered. A florist in New Jersey is planning to use four of the signs, and proposes to make an extensive planting of flowering and evergreen shrubs around each, with, perhaps, vines trained around the framework—an excellent idea, and one worthy of adoption generally.

The Campaign Fund.

Our Campaign Fund is not nearly big enough to enable our Committees

Single and Double Hyacinths

	Per 1000
Top Bulbs Named.....	\$80.00
First Size Bedding to Color.....	45.00
Darwin Tulips, Named Sorts.....	25.50
Single Early Tulips, Named Sorts.....	22.50
Single Late Tulips, Named Sorts.....	17.50

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SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or
Forward

Only Address, LANGPORT, Eng.

DUTCH BULBS PAPER WHITES JAPANESE LILIES

Write for prices

AMERICAN BULB CO.

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Burpee's Seeds

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BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
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WHOLESALE AND RETAIL

Reselected Strains in Seeds
Improved Styles in Implements
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Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden

Bronx Park NEW YORK CITY

to carry to completion their plans for general publicity. They find it no cinch to arrange campaign plans with simply an expectancy of funds being available to allow of such plans being put into effect. Support in their work cannot be too strong—at present it isn't even reasonable. The florists have given liberal support to various drives in the last two or three years, but are sadly neglecting to support their own drive, one which promises so much benefit to them. It is true that a goodly number of our craft are co-operating to provide a working fund, but in number they only represent little more than one tenth of the trade. If the remaining nine-tenths are not wholly indifferent to the movement, they are mighty slow to respond to the appeal constantly made to them. Their attitude is almost unbelievable. It was never thought that a florist usually, classed with the best fellows on earth, would withhold assistance to a project which promised so much for him individually, and was calculated to extend his opportunities for doing business. It is still hard to believe that such is the case—it is not, cannot be. It must be sheer forgetfulness. The matter of amount of subscription need worry nobody—it can be raised at any time. If \$10.00 is all that can be contributed, send it. If less, it will be just as welcome. Send something, if only to show appreciation of the work accomplished.

JOHN YOUNG, Secy.

1170 Broadway, New York.

December 6th, 1919.

HORTICULTURAL SOCIETY OF NEW YORK.

A lecture on "Korea and Its Vegetation" will be delivered by Mr. E. H. Wilson on Wednesday, December 17, 8 p. m., at the American Museum of Natural History, 77th street and Central Park West. Mr. Wilson is Assistant Director of the Arnold Arboretum. He has spent more than twenty years in exploring and collecting the flora of the Far East. Of this period eleven years have been devoted to Western and Central China, and three more to Japan and the outlying parts of that Empire, and to Korea. A part of the results of this work has been the addition to the gardens of America and Europe of nearly 2,000 species, a larger number of introductions than any one else can claim. All are invited to attend.

Rare, interesting, or unusual plants or flowers may be brought to the meeting, and facilities will be supplied for their display. A fund has been placed



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Natural Habit

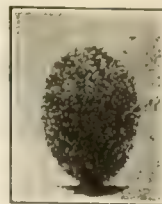
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THE NEW HYBRID

HARDY PRIVET

(L. Ibota x Ovalifolium)

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With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for future delivery.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties
Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue
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IF in need of RELIABLE NURSERY STOCK
that is well grown, well dug and well packed
Send to the **BAY STATE NURSERIES**
Wholesale and Retail **NORTH ABINGTON, MASS.**

at the disposal of the Exhibition Committee for the purpose of awarding prizes to worthy exhibits.

GEORGE V. NASH, Secy.

BOSTON.

W. D. Howard attended the meeting of the New York Florists Club Monday night and exhibited his new Bernice Carnation, which received many compliments.

Wollrath & Sons, of Waltham, recently sold George L. Lane, of Hartford, 500 cyclamens, which Mr. Lane is using to make an exceptional window display.

R. C. Bridgham, of Newton, has returned from a trip to New York and to A. N. Pierson's establishment at Cromwell, Conn.

Stephen B. Green, representing H. Bayersdorfer & Co., of Philadelphia, was in town last week and did a flourishing business. Mr. Green, whose territory extends over a large

part of the country, says that every indication points to an unusually successful Christmas business. In spite of high prices dealers everywhere are stocking up well and are confident that sales will be heavy. Mr. Green had expected to go on as far as Lewiston, but when he reached Boston found a letter instructing him to return to Philadelphia as the concern which he represented had all the business which it needed to keep it busy up to Christmas.

A head-on collision between two automobiles at the corner of Avery and Tremont streets, resulted in injuries to a young girl and the wrecking of one of the machines. Austin I. Smith, a West Newton florist and his 12-year-old daughter, Mildred Smith, were driving South on Tremont street when another car coming through Avery street narrowly missed crashing into a car owned and driven by John J. Corliss of 47 Farragut road, South Boston, and, in turning across the street, struck the car driven by Mr. Smith.

CARNATION CUTTINGS

Booking orders for December 15, and later. We are well prepared to supply in quantity and our growers have a high reputation for the quality of cuttings produced for years past. Have made special arrangements to supply **Laddie, Morning Glow** and **Pink Delight** from clean stock plants grown only for propagation purposes.

New and Scarce Carnations

	100	1000		100	1000
ETHEL FISHER (Peter Fisher), scarlet	\$14.00	\$115.00	MORNING GLOW	7.00	65.00
BERNICE (Howard), crimson	14.00	115.00	WHITE BENORA	7.00	65.00
RUTH BAUR	12.00	100.00	PINK DELIGHT	7.00	60.00
LADDIE	10.00	90.00	HERALD	7.00	60.00
			ROSALIA	7.00	60.00

Aviator, Belle Washburn, Doris, Benora, Rosette, Enchantress Supreme, White Enchantress, Beacon, Ward, Good Cheer, White Perfection, White Wonder, Miss Theo—\$6.00 per 100; \$50.00 per 1000. Matchless, Nancy, Alice and Enchantress—\$5.00 per 100; \$40.00 per 1000.

GLADIOLUS BULBS

Brenchleyensis, Fire King, Independence, Klondike—\$30 per 1000. America, Augusta, Halley, Mrs. Francis King—\$35 per 1000. Delice (1¼)—\$35 per 1000. Chicago White—\$45 per 1000. Mrs. Frank Pendleton, Niagara, Peace—\$50 per 1000. Mrs. Watt (1¼)—\$50 per 1000. Baron Hulot, Panama—\$60 per 1000. Schwaben—\$70 per 1000. New Primulinus Miranda, large flowers, 3 to 4 flower spikes per bulb, canary yellow color, light carmine markings—\$40 per 1000. XXX Special Mixture—\$30 per 1000. First Grade Mixture—\$25 per 1000.

For profit buy Primulinus Hybrids. We have them in quantity and of best selection. Don't forget Primulinus Hybrids average two to three blooms per bulb and are quick sellers in the market. Fancy, \$35 per 1000; regular, \$20 per 1000.

All first size except where noted.

CHRYSANTHEMUM Unaka, Golden Glow, Pacific Supreme, Early Snow, Oconto, Halliday, Early Frost, Chieftain, Golden Queen, October Frost, Smith's Advance, Charles Razer, Bonnaillon, Seidewitz, Dr. Enguehard. POMPONS—May Pope, Diana, Golden Climax, Baby Yellow, Fairy Queen, Western Beauty, Buckingham, Iva, Mrs. Frank Beau, Ciddie Mason, strong stock plants all at \$5.00 per 100.

Cash or satisfactory trade references. No C. O. D. Shipments.

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THE New Standard Cyclopedia of Horticulture has been freshly written in the light of the most recent research and experience. It is the fullest, the newest, the most authoritative of all works of its kind and constitutes the most conscientious attempt that has ever been made to compress the whole story of our horticultural thought, learning and achievement into one set of books. It is both an Encyclopedia and a Manual.

A Few of the Many Important New Features

Key to Identification of Plants This is a device to enable one to find the name of a plant. The name thus found is quickly referred to under its alphabetical location, where full information will be found in regard to it.

Synopsis of Plant Kingdom This is one of the most important features of the new edition. It constitutes a general running account of the classes, orders, and groups of plants, with a brief sketch or characterization of 215 of the leading families comprising those that yield practically all the cultivated plants. These family descriptions give the botanical characters; the number of genera and species and the ranges; a list of the important genera; brief statements in regard to the useful plants; and diagrammatic illustrations.

Illustrations There are 24 colored plates; 96 full page halftones; and more than 4,000 engravings which serve as guides in the text.

The Glossary This is an analysis of all technical terms that are used in the work and in similar works. It comprises botanical and horticultural terms with brief definitions.

Translation and Pronunciation of Latin Names In Volume I is inserted a list of between 2,000 and 3,000 Latin words used as species—names of plants, giving the English equivalent or translation and the pronunciation.

Class Articles Special effort has been made to secure the best cultural advices for the plants requiring peculiar or particular handling. Here are some of the titles of these articles: Ants, Autumn Gardening; Bedding; Diseases; Drainage; Floral Designs; Formal Gardening; Hotbeds and Coldframes; Insects; Landscape Gardening; Lawn Planting; Orchards; Rock Gardening; Subtropical Gardening; Tools and Implements; Village Improvements; Window Boxes, etc.

General Index The final volume contains a complete index to the entire work, enabling the reader to locate volume and page of any subject he has in mind.

The complete set of six volumes, bound in decorated buckram, will be delivered to you for only \$3 down and \$3 a month for 11 months, until the full amount of \$36 has been paid. Cash price \$36.

Further Particulars Sent on Request

HORTICULTURE, 78 Devonshire St., BOSTON, MASS.

HORTICULTURE, 147 Summer St., Boston, Mass.
Enclosed find \$3 for which send me the "Standard Cyclopedia of Horticulture" in book form, and I agree to pay you \$3 per month for 11 months until the full amount of \$36 has been paid. (Or cash with the order.)
Name.....
Address.....
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HORTICULTURE

Vol. XXX

DECEMBER 13, 1919

No. 24

THE TALK OF THE TRADE

Within a few years *Lilium regale* will be the leading florists' lily of the country. This is a prediction which I make with a great deal of confidence. It may be that members of the trade will not agree with me, but that will be because they are not very familiar with the lily and its possibilities. I think that the future of the Regal lily will not be questioned by those who saw it blooming at a meeting of the Horticultural Club of Boston last week. It was exhibited by William Anderson, the well-known superintendent of the Bayard Thayer estate at Lancaster.

Last fall Mr. Anderson potted up bulbs which he had been keeping in cold storage and in exactly twelve weeks he had them in bloom. Never before has this lily been forced for blooming so early in the winter. Mr. Anderson had expected to have the flowers in blossom by Christmas, but they came along faster than he had anticipated and he has found it necessary to retard rather than to push their growth. He says that forcing was a very simple matter. The potted bulbs were kept in a cold frame until strong growth had been started. After that they were moved to a house where the temperature was about that of a carnation house and where they developed their flowers rapidly.

One feature of the experiment was the fact that cold storage bulbs forced with perfect satisfaction. It becomes evident, therefore, that the bulbs can be handled in such a way as to meet all the requirements of the florists' trade. Mr. Anderson believes that the flowers can be forced for any week in the year. There is no reason why they shouldn't be ready for the market at Christmas and be in plentiful supply to meet the Easter trade. The lily itself is beautiful enough to sell without difficulty and its fragrance is one of its strong points. I know of no bulbous plant which offers greater opportunities to the florist than the Regal lily, and if I am not mistaken a lot of

money is going to be made through this flower the next few years. There will be money not only in the sale of the blossoms and the potted plants but also in the raising of bulbs, for they propagate readily and will reach flowering size in three years from seed.

The bulbs which Mr. Anderson forced for blooming this fall were four year old bulbs, but of a second size. He says that he could have forced three year old bulbs just as well. This successful experiment no doubt will open the eyes of many people in the trade and unless I am greatly mistaken the call for *Lilium regale* will grow by leaps and bounds as soon as its unusual value for florists' purposes becomes recognized.

Business considerations have a surprisingly obliterating effect. Only a few months ago men were declaring that never again would they buy a German product. Yet right now they are trying with all eagerness to get a portion of the German goods which are now coming into this country. A considerable amount of German goods is on sale for the Christmas trade. It includes baskets and other material such as Germany was wont to send over here for the florists' trade before the war.

Immortelles have come from France but in far smaller quantities than in former years. The bulk of the stock seems to be in the hands of Bayersdorfer in Philadelphia. Owing to the shortage, the price is naturally higher than ever before. In former years Immortelles sold for twelve cents a bunch. Now they are bringing 65 cents a bunch, and there isn't enough to go around at that price.

An interesting development resulting from the shortage is the sale of loose Immortelles in bulk. When they are being made up there are a great many heads which have a small piece of stem attached but not enough for making up into bunches. The Bayersdorfer people hit upon the idea of selling these heads loose and are getting a dollar a pound at wholesale. The demand is brisk, for the single flowers

may be used readily in making up wreaths and for various other purposes. The same number bunched would cost about three dollars, so that there is quite a saving to those who can use them with short stems.

A natural result of the scarcity of Immortelles has been an increased demand for red rope, enormous quantities of which are being sold this season. While the Japanese red rope is the best, the domestic article is cheaper and serves its purpose well enough. Because of the increased demand resulting from the high price of Immortelles the price of red rope has in its turn made a sharp advance. It costs something like fifteen cents more than ever before. There seems to be no lack of ruscus which of course sells well, although the price has increased in proportion to the other items.

There is a tremendous demand this year for artificial poinsettias. They are being made up in great numbers and sell more readily than ever before, the bright color of the bracts making a strong appeal to holiday buyers.

Much difficulty is being found in getting enough doves to meet the demand. Presumably the high price of food supplies has reduced the number of available pigeons. At any rate the Bayersdorfers are advertising for good white doves in papers all over the country. They themselves mount the birds. The demand for doves remains good in spite of high prices. Prices are high, too. Years ago doves were plentiful enough at seventy-five cents apiece. Now they cost two dollars apiece. Yet it is not unusual for one customer to give an order for many dozens. Doves are most acceptable when making up large funeral pieces. Wherever there is an Italian funeral these doves are almost certain to be seen. They are always effective when perched at the top of a large floral Gates Ajar.

Lorraine Begonias require a temperature of 53 to 60 to finish them, but will also require cooling off. Do not try to force the *semper florens* Begonias as they will only make soft growth and will not handle well either for shipping or delivery. They are profitable plants when grown cool and sturdy. Do not forget also to have a goodly stock of Boston and Whitman

ferns on hand as there is always a big demand for ferns of these varieties.

A fair amount of holly is coming into Boston, but as a rule it is not of the best quality. Henry Robinson seems to be particularly fortunate, as he is getting in two more cars than last year, when he didn't have enough of the goods to meet the demand. This year he was determined to have a plenty, in spite of the increased price, and he got it. Moreover, the quality is such as to make him happy.

SHORT HOURS FOR FLORISTS.

The early closing order hit the flower markets in Boston Thursday morning, with the result that announcement was made that they would close at 4 o'clock. This was at both the Co-operative Market and the Exchange. The markets opened at 7 o'clock as usual, but with only a few lights burning. The rule now is to burn only enough lights to make it possible to do business. Of course the retail stores were made subject to conservation orders, too, and loyally agreed to do their part in helping to save coal. Penn is closing at 5.30 and is working in the morning without lights. Few florists are as well situated as John O'Brien, who with his twelve windows, burns practically no light and needs no heat because of the big chimney running through the store. At Carbone's the 5.30 closing rule was adopted promptly and no lights were used in the morning. As enough heat was allowed to keep the store reasonably warm, business was carried on without great difficulty.

ALEXANDER MONTGOMERY'S CONDITION.

Alexander Montgomery, the veteran rose grower of Hadley, Mass., was operated on for gall stones early in the week. He came through very well and his friends feel much encouraged.

CHRYSANTHEMUM SOCIETY OF AMERICA.

Report of the new Chrysanthemums submitted to the committee appointed by the Chrysanthemum Society of America.

Exhibited by Elmer D. Smith & Co., Adrian, Mich., at Chicago. Sunbeam, yellow Jap. incurved, commercial scale, 88 points. Frank Wilcox, Jr., golden bronze pompon, scale for pompon varieties, 92 points.

CHAS. W. JOHNSON, Secy.

CHRISTMAS PREPARATIONS IN THE RETAIL STORES.

There is a great field for some inventive genius to bring out a container for the delivery of plants in bloom. Meanwhile it is necessary to take every precaution possible.

Treatment in stores is by no means easy, and here much damage is done. If store clerks would learn something about plant physiology, some advance might be made, for as a class they know less about plants than any other section of the profession. All the provisions possible for the care of plants in the store is well worth while. Space is generally at a premium, making it imperative to utilize every available inch. It is of course easy to say that a plant in the store should have as much room as it had on the bench, but it is not always practicable. The result too often is a crowding altogether, regardless of the ultimate consequences. No definite rules can be laid down, but it is wise to load up the store only for as short a time as absolutely necessary. In nearly all cases, the plants have to be reserved for last day delivery, so that the reason for this suggestion is obvious.

To sum up, a plan should be displayed to show as much of it as possible, and in such a way as to make it easily accessible for sale. A little time and thought can usually affect this. There is no need to talk about clean pots here. No store worth considering would tolerate anything else. One matter sometimes overlooked at the rush season is care in watering. It should be remembered that plants finished for sale have had constant care, and stock of this kind is naturally sensitive to neglect. It should be the duty of someone to look carefully after this even though business is being done at high pressure. Wrapping and delivery should have every attention, for here is another point where needless damage is often done. Apart from the moral necessity of completing the sale satisfactorily, there is an advertising value attached to either plants or flowers delivered in good condition. At this season the retailer reaches potential customers in a larger degree than at any other time, hence the wisdom of unusual care.

In connection with the holiday plant trade, sundries are generally freely used, and at this season are more permissible than at other times. A cover of some sort should be used for practically all plants, taking care that the value of cover is only proportionate to the value of the plant. Crepe paper, mats, baskets, jardinieres, etc., may each find a place, and, used

artistically, are real selling forces.

Made-up baskets constitute a good part of the Christmas trade, and for window decoration can hardly be surpassed. They are easily and quickly replaced, when necessary, and not difficult to handle for sale. For general interior decoration, it is generally possible only to display the largest quantity to the best possible advantage, and with some thought and care even under these conditions effective results may be reached. As in all worth-while business, efficiency is the florists' watchword. This alone secures the approval of customers with consequent profitable trade.

Prepare well in advance a system whereby the work of writing cards, labels and express prepaid-slips is done when the order arrives and not left till there is so much to do. Don't forget to put system into all your arrangements.

If you are a wise man, you will have made notes on last year's business. You will have notes about what sold and what did not sell. You will have notes about the grower who sent you poor plants and "pickled" roses, and on the quantity of stock left over. Go over these notes early, and let them be your guide for ordering this Christmas, allowing for new things and the increase in business you rightfully expect this year.

Make up a few plant combinations a week or so before Christmas from which to take orders. If your potting bench is not convenient to your store, construct a temporary one that is. This will enable you to make up your baskets and the suggestions of your customers without walking one hundred feet or so to your potting shed and keeping your customer waiting.

—Canadian Florist.

THE PERCENTAGE PLAN.

Its Advantages in a Co-operative Plan for Raising Money.

Having been in at the start on the campaign of advertising flowers, naturally I have some very fixed ideas as to how the money for advertising should be obtained.

I cannot say that I am entirely in accord with the methods used by all of the clubs in various sections of the country, and I do believe that the percentage plan is the best way to secure the money for any co-operative campaign. The coffee trade, paint trade, the business of making magnetos, and various others, are advertising co-operatively and I understand from many of those interested, that the money is obtained on a percentage or assessment basis.

Many men and organizations are opposed to giving out information as to the amount of business they do, consequently they do not like to be assessed on the basis that they reveal these business secrets.

Again, the entire burden should not fall on the growers; the work of obtaining funds under the percentage plan as now proposed, is distributed between the wholesaler and retailer. Eventually this whole arrangement comes back to the consumer, so that if the percentage plan is used, there is no reason for any one to worry about where the money is coming from.

I do feel, however, that the plant grower, the retailer, the supply house and the commission dealer, should all make voluntary subscriptions to the fund, because, under the percentage plan they do not give anything directly to the cause.

I should like to convey the idea that it is my opinion that the best means is the percentage plan, and that the other businesses I have mentioned should contribute voluntarily, and they should be broad enough to realize that the advertising in the end can have only one effect and that is the benefit to all concerned, and they should make their subscriptions liberal.

The campaign for advertising flowers should go on and on with increased activity; each year the national campaign should be amplified by local campaigns and by campaigns of the individual retailer. In fact you cannot "Say it with Flowers" too much or too often.

W. F. THERKILDSON,
Manager, Agricultural Division
N. W. Ayer & Son.

HOLYOKE AND NORTHAMPTON FLORIST CLUB.

The annual meeting of the Florists Club was held, Tuesday December 2, 1919, at E. J. Canning's, Northampton, Mass.

The President Harold Keyes, was in the chair. The election of new officers followed the general business proceedings and the officers elected were: President, G. W. Thornlly, Northampton, Mass.; Vice-President, Harry J. Sinclair, Holyoke, Mass.; Secretary and Treasurer, James Whiting, Amhurst, Mass. Local Press Representative, Ned Hennsey, Northampton, Mass.; Corresponding Secretary, Alex. Hoessler, Northampton, Mass.; Executive Committee, A. B. Butler, Secretary, Wm. Schwartz and E. J. Canning. The January meeting will be held with Butler & Ullman at Northampton. P. H.

William W. Edgar Co.
FLORISTS

WAVERLEY, MASS.

"THE HOUSE OF SERVICE"
Call Belmont 600

SEASONABLE FLOWERING PLANTS

Cyclamen, Begonias, Primulas, Chrysanthemums, Peppers, Jer. Cherries, Paper Whites, etc.

Visitors Always Welcome

CANNAS

A large stock of several varieties. PRICES RIGHT. Let us book your order now for shipment at any time.

PARKER BROS. NURSERY CO.
FAYETTEVILLE - - ARKANSAS

FAMOUS WABAN ROSES

Grown and sold exclusively by

WABAN ROSE CONSERVATORIES

Roses at wholesale; shipped by express anywhere.

Kinds: Russell, Hadley, Ophelia, Premier, Thayer, Brilliant, Killarney, White Killarney. Contracts given for minimum deliveries daily or weekly, with protection in Holiday Seasons.

Write or telephone
Mention this Paper

BOSTON OFFICE, 15 BEACON STREET
HAYMARKET 800

ANOTHER BILLBOARD LETTER.

Wellesley, Mass., Dec. 8, 1919.

Mr. Editor:—I believe in saying it with flowers. A sentimental idea goes with "Say it with flowers." From a business point of view, I should think it would be a very good—what you call—slogan.

My impression is, that billboard advertising would undermine that sentiment in time. It would so to say—after a while, become a "chestnut," like the Moxie man—"Drink Moxie," and, especially when the signs became one-legged, and weatherworn.

I do not think standardization of signs a good idea. The monotony would become tiresome.

There is a good deal of objection, here in Massachusetts, to billboard advertising. The sentiment of the public at large, is against it. In many communities it is regarded as vulgar, and it is part of the programme of village improvement societies and town improvement committees to eliminate them. Individual signs may be ornamental, or artistic—if you like the word better—but the bulk of them are not. Many of them are tyrannical, even domineering.

We do not say "Say it with flowers"

ought to be classed among these, but it would be, for association would make it so.

There could be no objection to florist using the sign on their own property. I think they should stop at that

T. D. H.

ELECTRIC LIGHTS TO FORCE FLOWERS.

Geneva, N. Y.—Electric light to force the bloom of carnations and chrysanthemums is to be experimented with by the florists of Geneva to prepare for the Christmas season.

This new scheme is due to the fact that because of the cloudy weather which preceded Thanksgiving the local florists estimated that they lost thousands of dollars in sales. In the week preceding the holiday there was an almost entire absence of sunshine, and consequently there was an advance locally of about 50 per cent in the price of carnations and chrysanthemums.

The big increase in the price cut down sales materially, while at the same time the growers had thousands of plants in their greenhouses which did not bloom because of the lack of sunshine.—*Elmira Advertiser*.

HORTICULTURE

Established by William J. Stewart in 1904

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EDWARD I. FARRINGTON, Editor.
 Telephone Fort Hill 3694

ADVERTISING RATES:

Per inch, 30 inches to page..... \$1.25
 Discount on Contracts for consecutive insertions, as follows:
 One month (4 times), 5 per cent.; three months (13 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.
 Page and half page space, not consecutive, rates on application.

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Billboards

In all the billboard discussion which has been carried on through the columns of *HORTICULTURE* and which has brought out some pretty vigorously expressed opinions pro and con, it does not appear that those taking opposite sides on the issue are really very far apart after all. The florists, as well as Mr. McFarland and others who have supported his views, agree that there are places where billboards would be a disgrace, and billboards which in themselves are worthy all the condemnation which may be heaped upon them. The facts seem to be that those who express themselves in opposition to billboards are thinking as a rule of the gaudy, poorly executed and in-artistic signs which are often seen along the railroads and other much traveled routes. Now there can be no doubt that signboards of this kind merit whatever censure may be bestowed upon them. We have seen billboards which would not be approved by the most lenient censors. We have also seen billboards which in themselves are actually artistic and so placed that they hide objects which would otherwise disfigure the landscape. It appears, therefore, that the bill board, per se, is not necessarily an evil. All depends upon the character of the sign and the way in which it is used.

This is the first editorial expression which *HORTICULTURE* has given concerning this matter, and it is with pleasure that we note an editorial in the *Florists' Exchange* which takes much the same point of view. There can be no question of the sincerity of Mr. McFarland and many other good people who have waged bitter warfare on billboards in general for many years. To the extent that they have assailed such advertising mediums when they are badly done or so placed that they spoil an otherwise beautiful landscape their efforts are to be commended. It is to be hoped and expected that florists, who have a keen appreciation of the beautiful and of nature's handiwork, will refrain from the placing of signboards where they can arouse criticism. The boards themselves as put out by Secretary Young's office are so ornamental as to disarm criticism at the start. It is conceivable that they may be used oftentimes in such a way as to cover up sights which offend the eye and so serve a genuine esthetic purpose. We hope that the distinction between billboards which are bad in themselves and placed without regard to the public interest and those which are conceived and executed in the best

of taste and placed with a full appreciation of the public's right to attractive views will not be overlooked. Apparently some of the critics have not realized that there are billboards which are offensive and that florists in general may be depended upon to use them in situations where no protest can be expected.

Possibly the discussion has had a greater value than has been realized. In any event it has brought out a greater number of diverse views than were perhaps thought to exist, and it may result in a movement that in the end will please and benefit even those who, like Mr. McFarland, have been honest but severe critics of billboards in general.

Holiday dates

One of the daily papers makes the following interesting comment on changing the Date for Thanksgiving: "In commenting upon the suggestion that the date of our annual Thanksgiving Day be changed to the Thursday nearest Armistice Day, November 11, we overlooked the fact that as early as April 23 of this year Strawbridge & Clothier, of Philadelphia, in one of their advertisements advocated such a change, suggesting November 11 as a permanent date for Thanksgiving. This was in ample time to have the suggestion adopted for the present year, and it is to be regretted that it was not followed, but the idea is so good that it surely will meet with general approval, and next year should see Thanksgiving Day start upon its permanent association with the end of the world war."

If such a change were made the flower trade would certainly appreciate it, as it would give them a longer breathing spell to get ready for the next holiday—Christmas. As it is now the two holidays come too close together for comfort.

"Why is it we do not have organized Autumn pilgrimage excursions to view the wonderful mountain autumn scenery of our Massachusetts hills and the mountains of New Hampshire?" That is a question propounded by Thomas Dreier in "The Blue Flower" published by Henry Penn. The question is one which might well be echoed all over the country. For some reason Americans fail to appreciate as they should the opportunities which they have to enjoy nature at its best. It is a fact that nowhere in the world are autumn colors so rich and gorgeous as in New England. It would seem as though institutions like the Arnold Arboretum should be crowded with people on bright autumn days, eager to see the wonderful display of nature's handiwork, perhaps repeating the poet's lines:

"Who can paint like Nature? Can imagination boast,
 Amid its gay creations, hues like these?"

"The Blue Flower" goes on to elaborate this thought in the following words, to which we say amen:

"Wiser than we in many ways, the Japanese have excursions of this kind. Professor Ernest H. Wilson of our own Arnold Arboretum says in October when the woods assume their autumn splendor children from primary and secondary schools, high schools and colleges with their teachers and professors make excursions of three or four days' duration to the noted place and revel in the feast of color.

"Even the railways issue cheap tickets and from all the large towns and cities children, youths and maidens journey to the mountain woods.

"One trip into the autumn woods will give one enough beauty to last all winter."

ROSES UNDER GLASS.

With the coming of the cooler weather, growers are tempted to keep their ventilators closed too much. This is a sad mistake. Not that we think it is right, or profitable to keep the ventilators well open and shovel coal to heat the band, but there is a limit to both open and shut ventilators. Keep the air in the houses fresh and sweet, and do not be in too much of a hurry to close up at night. In fact, if the houses are at all tight, air should be kept on until the temperature outside drops to 26, when the ventilators should be closed. It is well to watch in the evening and not have the house closed down when the sun is shining on it. It is not necessary to have the ventilators open very much, as a tiny crack will let out a whole lot of foul air.

Here is where nice straight ventilators come in right. If there is anything about a greenhouse that would annoy me, it would be ventilators that do not open evenly, and I certainly would lose no time to repair them in some way to make them work properly. It may be necessary to remove the rods, and fasten them all over again in new places, but it will pay to do this, for that may just be the difference between good clean roses, and sickly ailing ones.

Whenever it is warm and foggy outside, carry a little steam in the pipes, even though only one pipe in a house, and keep air enough on to keep the house sufficiently cool. Do not let the temperature go over 66 on cloudy, rainy days, and up to 76 on clear days, with air all the time. As the summer is gone, so is fall, and winter is now here, it will be necessary to be right on the job when it comes to ventilating, and it is necessary to apply a tiny crack of air, as soon as the houses get to 64 mornings on clear days, then apply air every four degrees until the houses reach the desired temperature. Be very careful to have only enough air applied to keep the houses going up all the time, and then when the maximum is reached, put air enough on to keep the temperature steady, without going up too high, at the same time see to it that the houses do not become chilled by putting on too much air at once. Watch the sky continually for clouds, and as soon as any appear on a cold day, drop the ventilators at once, not altogether, but according to conditions.

The idea is to have the ventilators down before the temperature begins to drop, as it will then drop very slowly, and that is just what is necessary. Have the temperature fluctuate as little as possible, and then only very

CHRISTMAS PLANTS

Cyclamen, \$1.50 and up; Begonias, 75c to \$2 each; Poinsettias, single, 50c, 75c and \$1 each; pans, made up with Ferns and Peppers, \$1.50 to \$4 each.

FERNS, Scottii, Verona, Boston and Roosevelt, 50c to \$2 each.

FRANK EDGAR, Waverley, Mass.

ANNOUNCEMENT

The New Crimson
Carnation for 1920

BERNICE

Orders filled in strict
rotation for December
and January delivery

:STOCK LIMITED

WRITE FOR DESCRIPTIVE CIRCULAR

PRICE: { \$ 14.00 per 100
 { 115.00 per 1000

W. D. HOWARD, Milford, Mass.

slowly. Then watch again for a clear sky, and add a little air before the houses go up very much. Always try to be there ahead of time. When a cloudy streak is coming, start the steam at once, and have it around the house by the time the temperature gets to where steam is needed. That is, of course, if it is chilly outside, so that the roses would really suffer if they were not given heat.

HUMOR IN THE SAY IT WITH FLOWERS CAMPAIGN.

Sometimes it is a relief to turn from the serious to the humorous side of a business matter. It is so with the Say It With Flowers Campaign and the following communication no doubt will be read with genuine amusement:

The Society of American Florists having asked me to elucidate their advertising slogan and show how it can be put to practical use, I am submitting the following illustrative suggestions.

1. Red roses, in the floral language, mean "love." The timid lad who hardly dares to say the word can send a dozen blossoms of Hadley, which he can buy of any of our members for \$3.50, postage and packing extra.

2. In case the young man wishes to signify further that he has more money than taste he can send American Beauties at \$3 per bud.

3. White carnations represent "modesty," partly on account of their low price. The young lady who re-

ceives the American Beauties should send a return of white carnations.

4. As a gift to an elderly spinster who has lost her way a corsage of "Love-in-a-Mist" is recommended.

5. To send to President Wilson in commiseration at the failure of the daylight saving bill, a large bouquet of Four-o'clocks. This illustrates how easily almost any occasion can be fitted—any sentiment expressed.

6. To convey our distinguished regards to Senator Lodge a bouquet of cockleburs and skunk cabbage.

7. If a young lady objects to the smoking habits of her steady she should send him a bouquet of Babys Breath.

8. If one wishes to intimate to the pastor that his sermons are altogether too long for the fine weather he may send the flowers of the Century plant.

9. Should the feeling arise that the mayor is rather taking matters too much into his own hands what could more neatly convey our opinion than a gift of Kaiser-blumen?

10. Candidates running for Congress in suffrage constituencies should send bouquets of daisies to all leading lady voters.

ALAN McWAUGH.

C. J. McGregor & Son, florists, are building another greenhouse at their Chapel street property, Newburyport, Mass. It is located between two of the other houses. Much of the material was secured from a house that was removed from the Kent & Marsh place on North Atkinson street.



"The Telegraph Florist"

Member of Florists' Telegraph Delivery

124 TREMONT ST.

BOSTON

H. F. A. LANGE

Worcester, Mass.

Delivers to all Points in New England

150,000 Square Feet of Glass

Member Florists' Telegraph Delivery Association

WORCESTER, MASS.

Randall's Flower Shop

HARRY I. RANDALL, Proprietor.
Member Florists' Telegraph Delivery

Providence, Rhode Island

Johnston Brothers

LEADING FLORISTS

38 Dorrance Street

Member Florists' Telegraph Delivery

Quality and Reliability
WARBURTON

FALL RIVER, MASS.

Deliveries of Flowers and Plants in FALL RIVER and contiguous territory.

The Beacon Florist
Beacon Street, BOSTON
Near Tremont

J. EISMAN, Manager, 14 years head decorator and designer for Penn's.
Prompt, Efficient Service Guaranteed.



Flowers by Telegraph

Leading Retail Florists Listed by Towns for Ready Reference. Orders transferred by telegram or otherwise to any of the firms whose address is here given will be promptly and properly filled and delivered.

Beverly, Mass.—Beverly Flower Shop.
Boston—Penn the Florist, 124 Tremont St.
Boston—Zinn the Florist, Park St.

Brockton, Mass.—Belmont Flower Shop.
Boston, Mass.—The Beacon Florist, Beacon St.

Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.
Buffalo, N. Y.—S. A. Anderson, 440 Main St.

Cambridge, Mass.—Harold A. Ryan.
Cleveland, O.—J. M. Gasser Co., Euclid Ave.

Cleveland, O.—Adam Graham & Sons, 5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th St.

Cleveland, O.—The Smith & Fettes Co., 735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643 Broadway.

Detroit, Mich.—J. Breitmeyer's Sons, corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017 Grand Ave.

Lawrence, Mass.—A. H. Wagland.

Malden, Mass.—J. Walsh & Son.

New York—David Clarke's Sons, 2139-2141 Broadway.

New York—Dards, N. E. corner 44th St. and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth Ave.

New York—Kottmiller, 426 Madison Ave. and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415 Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad St. at Cumberland.

Providence, R. I.—Johnston Bros., 33 Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28 Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-son Co.

Taunton, Mass.—Hall the Florist.

Toronto, Can.—J. H. Dunlop, 8-10 West Adelaide St.

Washington, D. C.—Gude Bros., 1214 F St.

Washington, D. C.—George H. Cooke, Connecticut Ave. and L St.

Worcester, Mass.—H. F. A. Lange.

Worcester, Mass.—Randall's Flower Shop, 22 Pearl St.

CAMBRIDGE, MASS.

581 MT. AUBURN STREET

HAROLD A. RYAN, Inc. Member F. T. D.

BROCKTON, MASS.

Belmont Flower Shop Member F. T. D.

HIGH GRADE PLANTS

For Retail Stores a Specialty

ASK FOR LIST

THOMAS ROLAND, Nahant, Mass.

LAWRENCE . . MASS.

A. H. WAGLAND

We Cover

LAWRENCE, METHUEN, ANDOVER, NORTH ANDOVER, SALEM, N. H. and Contiguous Territory
Member of F. T. D.

BEVERLY, MASS.

BEVERLY FLOWER SHOP Member F. T. D.

MALDEN, MASS.

J. WALSH & SON Members F. T. D.

HALL, The Florist

Telephone 1422

4 Main Street, **TAUNTON, MASS.**

National Florist for Taunton and Vicinity



GUDE BROS. CO.
WASHINGTON, D. C.

Member Florists Telegraph Delivery

FLOWERS The Best at The Lowest



"I SERVE"

The Largest Popular Priced House in Philadelphia

F. M. ROSS

Send orders to

136 So. 52nd Street, Philadelphia.

Other Stores

13 So. 60th St., 212 E. Girard Avenue

PHILADELPHIA

Member Florists' Telegraph Delivery

Orders from all except members of the F. T. D. must be accompanied by remittance.

FOR

KANSAS CITY

Transfer Your Orders to

SAMUEL MURRAY

1017 Grand Avenue

Member Florists' Telegraph Delivery

IN THE

National Capitol

At your service to deliver Flowers
or Designs on Order by Tele-
graph or otherwise. Prompt
Reliable Service.

GEORGE H. COOKE

Connecticut Ave. and L St.
WASHINGTON, D. C.

Max Schling
Flowers

Schling Service
Nothing Better

785 Fifth Avenue, New York City

"Says It With Flowers"

DARDS FLOWER SERVICE
has spent GUARANTEED SATISFACTION
for nearly FIFTY YEARS.

Regular European sailings now established.
Let us fill your orders for Steamer Flower
Baskets, Corsages and Artistic Boxes of
Cut Flowers.

DARDS, Inc., Florist,
341 Madison Ave., New York

S. A. ANDERSON

440 Main St., Buffalo, N. Y.

ANDERSON service means fresh, sturdy
stock and prompt deliveries in BUFFALO,
LOCKPORT, NIAGARA FALLS and
WESTERN NEW YORK.

Member Florists' Telegraph Delivery

HESS & SWOBODA
FLORISTS

Telephones 1501 and L 1533

1415 Farnum St.

OMAHA, NEB.

THE KNOBLE BROTHERS CO.
Flowers and Nursery Products

Member Florists' Telegraph Delivery

We are well equipped to handle
your orders.

1506 W. 25th Street CLEVELAND, O.

THE SMITH & FETTERS CO.
735 Euclid Avenue
CLEVELAND, OHIO

Flowers of Every Kind in Season

PHILADELPHIA

CHAS. H. GRAKELOW F. T. D.

Everything in Flowers

Broad Street at Cumberland

The Park Floral Co.

B. E. GILLIS, President.
E. P. NEIMAN, Secretary.

Member Florists' Telegraph Delivery

DENVER, COLORADO

JOHN BREITMEYER'S
SONS

Cor. Broadway and Gratiot Aves.
DETROIT, MICH.

Artistic Designs - . . .
High Grade Cut Blooms

We cover all Michigan points and good
sections of Ohio, Indiana and Canada.
Members Florists' Telegraph Delivery
Association.

PHILADELPHIA.

John C. Gracey has awarded a con-
tract to Peter E. Hollenbach for the
erection of a new garage 54x120 feet
at 26th and Stiles street to cost \$14,-
000. This is within easy distance of
his floral establishment on Columbia
avenue, and will be used mostly for
the delivery autos.

The property at 1512 Chestnut street
has been sold to the Kittenhouse Trust
Co., who will move their bank there
from the Witherspoon Building. The
price paid is \$300,000. This item is in-
teresting as showing the increase in
values since 1875, when Pennock Bros.
bought the Twin Building next door
(1514) for \$28,800. The Pennock es-
tablishment is the oldest continuous
flower store in the city in one location.

H. L. Holmes, Holmes Seed Co.,
Harrisburg, Pa., was a recent visitor.

Edward C. Dungan of the Wm.
Henry Maule Co., has been on the sick
list for the past week. His physician
recommends among other things a few
weeks vacation down South.

The annual meeting of the Indiana
State Florists' Association will take
place at Indianapolis, January 13.
There promises to be a keen competi-
tion for the presidency.

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TORONTO

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any occasion, in any part of the Dominion.

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Fund for Market Development, also "Say
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BET, CARROT, PARSNIP, RADISH and
GARDEN PEA SEED in variety; also other
items of the short crop of this past season
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62 Day St., NEW YORK and ORANGE CONN

BURNETT BROS.

**Seeds, Bulbs, Plants
Etc.**

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Write for our Illustrated Catalog

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PLEASE NOTE—All Christmas Greens
shipped at buyer's risk of delay or
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Express or by Freight and Boat. We
recommend shipping by Express. All
prices subject to change without notice.

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Per 1/4 case... Per full case...\$7.00
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HOLLY WREATHS

	25	50	100
12 inch	\$6.00	\$11.00	\$20.00
14 inch	7.00	13.50	26.00
18 inch	11.00	20.00	38.00

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In 25 yard coils, made on double rope.
25 yards... \$3.25 250 yards... \$25.00
50 yards... 6.00 1000 yards... 90.00
100 yards... 11.00

MISTLETOE (MEXICAN)

1 lb.....\$.50	10 lbs..... \$4.50
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BOXWOOD (CUT)

In 50 lb. boxes only; \$11.25 per 50 lbs.

LYCOPODIUM (LOOSE)

25 lbs..... \$4.00	100 lbs..... \$14.00
50 lbs..... 7.25	

LYCOPODIUM WREATHING

In 10 yard pieces
10 yards... \$1.10 250 yards... \$22.00
50 yards... 5.00 1000 yards... \$5.00
100 yards... 9.00

Also all Seasonable Seeds, Bulbs and
Supplies. **SEND FOR OUR HANDY
FLOWER SEED ORDER SHEET**, if
you do not receive a copy.

P. S. New customers who may not be rated in Dun's or Bradstreet's will kindly send money orders or trade references with order, to avoid delays in shipment of Christmas Greens. If you have an account with us, wire your orders.

**MICHELL'S SEED HOUSE, 518 Market Street
Philadelphia**

The Seedsmen of the United States

By GEORGE WATSON

Up to about the time of the Revolution of 1776, there was not much in the way of seed trade as a separate industry in the United States. The early settlers brought their seeds with them and what more they needed they either saved themselves or imported. The earliest name that comes down to us from these days is that of James M. Thorburn, who is said to have been the prototype of John Galt's novel "Laurie Todd." He was the first in New York and perhaps contemporary with him was David Landreth of Philadelphia. About 1820, Joseph Breck established himself in Boston. Robert Buist started in Philadelphia in the thirties. Bolgiano seems to be about the oldest in Baltimore history. All these seed houses are still doing business under the names of their founders. Among more modern founders, Peter Henderson stands out conspicuously and that foundation is now in its third generation and a great house.

W. Atlee Burpee began about fifty years ago with fancy chickens as his specialty branching out into mail order flower and vegetable seeds. Wm. Henry Maule joined him for a while then started out for himself and made a big success. Both these houses are now being actively conducted by the second generation. Fottler and Farquhar of Boston are both distinguished names and like the others mentioned are known far beyond local confines.

J. C. Vaughan is probably the most noted of western seedsmen. He was from the East but to Yankee shrewdness added the western expansiveness and soon founded a great business. His son Leonard Vaughan is actively associated with his father and is today recognized as one of the best all round men in the business today. Like many others the elder Vaughan started at first in the florist end of the business, and added the seeds later. A very noted house—that of Henry A. Dreer—began as plant growers and developed other branches as the years rolled by.

Wm. F. Dreer, the son of the founder, was known the world over as a great seedsman, his early training having been supplemented by some years' experience in the foremost European houses.

Henry F. Michell got his early training in Dreers and his establishment has grown in the past thirty years to countrywide proportions. Houses in the West are getting more and more plentiful as population has increased and called for larger variety in seeds as farming has changed more to gardening until now nearly every city of any size has its own seed house. The growing of seeds is not confined to any one locality but spreads all over North, South, East and West as soil and climate may best suit any particular item of the many thousands now standard in gardening, farming and floriculture. Europe, Australia, New Zealand, South Africa, are also called on for a large part of the supplies and even the little island of Teneriffe like Bermuda has been found super excellent for a number of crops.

The name of D. M. Ferry in a special branch of the trade—known as the box commission packet trade—is a household word all over the country—every country grocery and drug store having handled these for many years. The Ferry business has long been the largest of its kind but there are scores of other houses now doing business along the same lines. In his later years Mr. Ferry enjoyed high political honors—governor of the state of Michigan being one of them. The name of James Vick of Rochester also stands high in the annals of horticulture and the seed trade. About forty years ago Hiram Sibley, a millionaire contractor, made quite a splurge in the business in Chicago and Rochester but he got tired of it after losing about a million. Another millionaire made a similar effort fifteen or twenty years ago in San Francisco with nearly the same results. These two instances are not the only ones but they emphasize the fact that the seed business is not particularly a good field for the plunger. The humbler citizens, after the style of James J. H. Gregory of Hubbard squash fame, are better adapted for it. (On second thought it was Grant Thorburn, not James, who was "Laurie Todd.") A word of mention may be in order for Uncle Sam as a seedsman. His special branch is giving seeds away for nothing, and few of us can afford that. Even Apple Seed Johnny, who flourished from 1800 to 1840 in the backwoods of Pennsylvania and Ohio, got his meals in return for his welcome gifts of seeds of the forbidden fruit.

HOLIDAY DECORATIONS

Holly, XXX Quality

Mistletoe

Prince's Pine

Laurel Wreathing

Holly Wreaths

Cut Boxwood

Japanese Roping

Immortelles

RAFFIA—Fresh shipment just arrived

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THIS SEASON'S NEW ROSES

PILGRIM CRUSADER PREMIER RUSSELL HADLEY

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Fancy and Dagger Ferns \$2.50 per 1000

All Seasonable Cut Flowers Always on Hand.

New Crop Bronze and Green Galax Leaves.

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National Nurseryman Pub. Co., Inc.
HATBORO, PA.

DESTROYED BY HAIL

Last Summer a florist who had imagined he was outside of the hail section lost upwards of 50,000 square feet of glass by hail with no insurance to recompense him.

He is now a member of the Florists' Hail Association of America.

Profit by experience and join the Association now. Address

JOHN G. ESLER, Secretary
Saddle River New Jersey

RAMBLING OBSERVATIONS OF A ROVING GARDENER

If Solomon were alive today and horticulturally inclined, he might change his famous saying about books to make it read, "Of the making of new chrysanthemums there is no end." As usual, there have been a considerable number of introductions this season, and particular attention has been given to those produced by the Department of Agriculture at Washington. Perhaps this is because of the famous names which have been bestowed upon them, no doubt in an effort to recognize new international relationships. At any rate, among the new mums we find Queen Mary and General Foch, as well as General Pershing and Mrs.

Woodrow Wilson. Some of the papers have given prominence to the Pershing and Wilson mums in a rather unique way by printing photographs of these flowers with the faces of the General and the President's wife in the center of the blooms. Among the new mums created by the government horticulturists are three plants almost exactly alike except for their leaf formations, and which have been named for the first three American soldiers to give their lives on the battlefields of France—Corp. James S. Enwright, Private James Gresham, and Private Merle Hay. The flowers of these three plants are mixed light red and gold. A very good mum seems

to have been chosen to bear General Pershing's name, for the color is deep red. It is described as a particularly large and stately flower. Mrs. Woodrow Wilson and Queen Mary are both white. According to newspaper accounts the names of the different new mums were chosen by workers in the government greenhouses.

The chrysanthemum shows in Washington as elsewhere have been especially appreciated this year, judging by the great numbers of people who have flocked to see them. It is said that during the first week of the Washington show more than 20,000 inspected the new flowers. Exhibitions of this kind have an educational value to the public and they give private growers and gardeners an opportunity to inspect the best of the new offerings. It is a fact, though, that a great majority of the new chrysanthemums, as with other flowers, quickly pass into the discard, while some of the old favor-



The Ever Popular Chrysanthemum Bob Pulling



The Meyer Florists' Green Thread is different from any other make. Every spool contains 2 ounces of actual thread, 16 ounces to a pound. See that you get the Meyer Florists' Green Thread and you will get the very best thread in the world. Don't take any substitutes.

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1619-21 Ransdell St., Philadelphia, Pa.

CHOICE BEAUTIES, ORCHIDS, VALLEY, ROSES
and all Seasonable Varieties of Cut Flowers

Wired Toothpicks

Manufactured by

W. J. COWEE, Berlin N. Y.

10,000....\$2.50 50,000....\$11.00 Sample free.
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WHOLESALE FLORIST

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Wholesale Commission Florists

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Telephone No. 755 NEW YORK
Farragut

ites are grown year after year, nothing good enough to displace them being produced.

There are certain chrysanthemums which nearly all private growers like to show. Mrs. Gilbert Drabble is one of these varieties, and has kept its popularity for a long time. Wm. Duckham is another well liked variety. For years it has been one of the best incurring exhibition pinks. Odessa is another incurring form, but bright yellow, while a seedling from Merza, it is cleaner in growth. Lady Hope-town is a mum very commonly grown where size is the aim. It is somewhat weak in the neck, but then it would be staked anyway. After all, though, there are few exhibition mums to out-class Bob Pulling, which was a novelty in 1915. Its extreme size makes it noteworthy and its color is of the purest. Nothing better has yet been produced.

PATENTS GRANTED.

1,315,276. Replanter. August Blasing, Manhattan, Kans.

1,315,567. Wheeled Cultivator. Paul C. Miller, Hagan, Ga.

1,315,918. Threshing Harrow. A. C. Finseth, Eugene, Ore., assignor of one-half to G. E. Robinson, Eugene, Ore.

1,315,923. Plow. Henry E. Fudge, Port Lavaca, Tex.

1,315,943. Handle for Picks and Other Tools. Benjamin Brockbank, Ramsay, Mich.

1,315,977. Lawn Mower. F. H. McLain, University, Neb.

1,316,183. Orchard Cultivator. F. F. Pratt, F. F. Farmer & James Kemp, Whittier, Cal.

1,316,235. Tractor Plow. Walker H. Himes, Grove City, Pa., assignor to Himes Cohen Tractor Co., Grove City, Pa.

1,316,316. Combined Cotton Chopper and Cultivator. Wm. R. Maxville, Vendor, Ark.

1,316,467. Budding Clasp. Vincent Tollis, Clifton Springs, N. Y.

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FLORIST SPECIALTIES
New Brand New Style
"RIVERTON" HOSE

Furnished lengths up to 100 ft. without seam or joint

The HOSE for the FLORIST
1/2-inch, per ft., 10 c.
Reel of 500 ft., " 18 1/2 c.
Reels, 1000 ft., " 18 c.
1/4-inch, " 16 c.
Reels, 500 ft., " 15 1/2 c.

Couplings furnished without charge

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Wholesale Commission Florist
Choice Cut Flowers

New Address, 143 West 28th St., NEW YORK
Telephones: 2200, 2201, Madison Square.

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Wholesale Florist
107 W. 28th Street, NEW YORK
Telephone 5335, Farragut
Call and inspect the Best Establishment
in the Wholesale Flower District.

WALTER F. SHERIDAN
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CHOICE CUT FLOWERS
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RICHMOND, IND.

Please mention Horticulture when writing.

REED & KELLER
122 West 25th St., New York
Florists' Supplies

We manufacture all our
Metal Designs, Baskets, Wire Work & Novelties
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Florists' Requisites

THE KERVAN CO
Fresh Cut Decorative Evergreens
Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
Catalog of Greens and Florists' Supplies
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Brooklyn's Foremost and Best
WHOLESALE COMMISSION HOUSE
First Class Market for CUT FLOWERS
Willoughby St. Brooklyn, N. Y.

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D. J. Pappas, Pres.

FRANK J. REYNOLDS CO.
Wholesale Florists
Boston Co-operative Flower Market
260 DEVONSHIRE STREET
BOSTON, MASS.

GENERAL NEWS NOTES.

A florist's store has been opened at Tyrone, Pa., by Glenn Melloy. It is located near the Pennsylvania railroad station.

The Hart Floral Co., of Blackwell, Okla., are busy reconstructing their workroom and office recently destroyed by fire.

Harry L. Smith has purchased the retail business of J. Ralph Souder, of Hutchinson, Kansas. The store in the Rorabaugh-Wiley Building will be continued. Mr. Souder will continue his greenhouses.

The new greenhouses constructed by E. R. Tauch in Marquette, Mich., gives them 16,000 feet of glass. An electric aeroplane fan is a feature of the salesroom.

Ralph M. Ward, now located at Lawrence, Kansas, has placed an order with Lord & Burnham Co. for two iron frame houses, each 40 x 200 feet.

Henry Durenberg, a florist of St. Louis, was recently the victim of a highway robbery in which he lost his money and received a bad wound in the head.

The next meeting of the Boston Gardeners' and Florists' Club will be held December 16 at Horticultural Hall. The election of officers will take place at that time and there will be an exhibit of Christmas plants. A carnation exhibit and probably a lecture on the subject of carnations is being considered for a winter event.

The Howe Floral Shop at Tucson, Ariz., has resumed business after extensive alterations, which were interfered with by delay in getting building material. The store now makes a handsome appearance, with floor, wainscoting and stairs tiled in ivory. There is a circular fountain with a gold fish pool and handsome refrigerators with plate glass fronts.

The Meadow Brook Nursery has been incorporated at Englewood, N. J. The president is E. M. Carman, the vice-president, Robert F. Green, and the secretary and treasurer, B. T. McGill.

Sydney Baird, of Baird Bros., Detroit, was injured recently when the smoke stack at his establishment was blown over.

Herman J. Simmons, who died at Toronto recently, left an estate of \$156,000.00, which goes to his relatives.

The Sand Point Greenhouse has been incorporated at Fort Wayne, Ind., with a capitalization of \$25,000. Charles H. Hoffman, Minnie M. Hoffman and Carl H. Schweppe are the incorporators.

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

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The Right People to Deal with. Phone Watkins 9761-159 Consignments solicited.

B. A. SNYDER CO. Wholesale Florists..

Hardy Cut Evergreens, Cut Flowers and Florists Supplies

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Telephone Fort Hill 1083-1084-1085

WILLIAM F. KASTING CO.

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568-570 WASHINGTON STREET - BUFFALO, N. Y.

New England Florist Supply Co.

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Would like to handle consignments from growers of good Snapdragon and novelties.

HERMAN WEISS, Wholesale Florist

130 West 28th Street, New York City

The House for Quality and Service

ZECH & MANN

We are Wholesale Florists Doing a Strictly Wholesale Business

30 East Randolph Street, CHICAGO

MICHIGAN CUT FLOWER EXCHANGE, Inc.

WHOLESALE COMMISSION FLORISTS

Consignments Solicited

Hardy Fancy Fern Our Specialty

264 RANDOLPH ST., DETROIT, MICH.

WIRE DESIGNS

DIRECT FROM MY FACTORY
FLORISTS' SUPPLIES
OF ALL KINDS

RED RUSSUS LAUREL
BOXWOOD

CHRISTMAS WREATHS ROPING
Best Quality Lowest Prices

J JANSKY

256 Devonshire St.
BOSTON, MASS.

THE BOILER OF Unequalled Fuel Economy

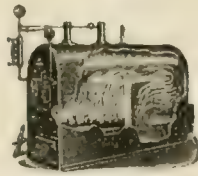
Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
WAVERLEY, MASS.

No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
CHICAGO

When You Buy—Get a Kroeschell

3,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1918.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

THE MARKET.

New York buyers have been in Boston the past few days and have pushed prices almost out of sight. The New York men have gone to the growers in some instances and have secured the cut for direct shipment to the metropolis. Carnations have been particularly in demand and have sold up to fifteen cents, an unheard of price. Some Boston retailers have fallen in line, however, and paid the same money. Laddie has been the flower commanding the highest figure. As a matter of fact, the Boston market has been very short of stuff the past few days. Supply was good Monday and carnations were down to six cents. They began to climb as the supply ran short. The market was about as skimpy on Thursday as for many a long month. Of course chrysanthemums are about done. The weather has not been very favorable to roses and novelties have not been plentiful. For the past week partridge berries have been coming in and have sold

A Prominent Carnation Grower Says This About the Standard Recording Thermometer



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NOW
\$35.00

STANDARD THERMOMETER COMPANY
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Gentlemen: Please send me 25 record plates like the enclosed sample, and I want to say that the machine, bought a good many years back, is keeping up its good work right along. I think it a very useful adjunct to good plant growing, and it should be in every greenhouse, its reference to it may often tell what is wrong with a batch of plants.

Very truly yours,
ALBERT M. HERR.

The actuating element of the Standard Recording Thermometer is of lamina metal, which, besides being extremely sensitive to temperature changes, is practically indestructible. Record charts are furnished either daily or weekly, and the whole mechanism is contained in an attractive metal case fitted with lock and key, which insures the record from being tampered with.

The clock movement is of extremely high grade; everything about the instrument is up to the highest possible standard of manufacture.

well at \$3.00 a dozen bunches.

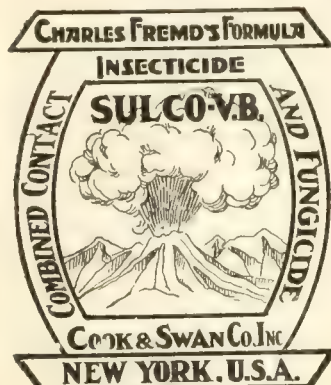
From most parts of the country come reports that holly is short and rather poor in quality, although well berried. In some of the western cities florists are getting only about 25 per

cent. of their regular supply. The crop seems to be short in the south and it is difficult to get labor. In addition the prospects of a freight embargo have had a discouraging tendency.

WHOLESALE FLOWER MARKETS—Trade Prices Per 100—To Dealers Only

	BOSTON Dec. 8	NEW YORK Dec. 8	PHILA. Dec. 8	CINC. Dec. 8	CHICAGO Dec. 8	PITTSBURG Dec. 8	BUFFALO Dec. 8
Roses							
Am. Beauty	12.00 to 75.00	3.00 to 50.00	30.00 to 75.00	10.00 to 50.00	12.00 to 50.00	25.00 to 75.00	5.00 to 75.00
Had. y.	12.00 to 40.00	3.00 to 25.00	40.00 to 50.00	8.00 to 2.00	4.00 to 15.00	..... to	8.00 to 1.00
Hoosier Beauty	12.00 to 4.00	3.00 to 0.00	..... to 2.00	7.00 to 15.00	4.00 to 15.00	..... to	6.00 to 20.00
Killarney	10.00 to 40.00	3.00 to 6.00	6.00 to 12.00	5.00 to 12.00	4.00 to 12.00	6.00 to 15.00	6.00 to 15.00
White Killarney	12.00 to 3.00	2.00 to 6.00	..... to 12.00	5.00 to 12.00	4.00 to 12.00	6.00 to 15.00	6.00 to 8.00
Mrs. Aaron W. rd.	12.00 to 35.00	1.00 to 8.00	6.00 to 13.00	5.00 to 10.00	4.00 to 12.00	8.00 to 2.00	8.00 to 1.00
Mrs. Chas. Russell	12.00 to 50.00	3.00 to 2.00	20.00 to 35.00	6.00 to 25.00	4.00 to 30.00	8.00 to 25.00	8.00 to 1.00
Mr. Geo. Shawyer	12.00 to 40.00	1.00 to 6.00	..... to 10.00	6.00 to 20.00	4.00 to 12.00	8.00 to 25.00	10.00 to 25.00
Co. umbia	10.00 to 30.00	3.00 to 20.00	2.00 to 30.00	3.00 to 35.00	6.00 to 12.00	6.00 to 25.00	1.00 to 15.00
Maryland	10.00 to 20.00	2.00 to 6.00	8.00 to 15.00	6.00 to 2.00	4.00 to 12.00	6.00 to 15.00	6.00 to 20.00
Ophelia	12.00 to 3.00	2.00 to 10.00	8.00 to 20.00	6.00 to 25.00	5.00 to 12.00	6.00 to 15.00	6.00 to 20.00
Adiantum	.75 to 1.00	.75 to 1.00	..... to 1.50	1.00 to 1.50	..... to .....	..... to 2.00	2.00 to 3.00
Asparagus plum 100 bchs	.75 to .50	.15 to .25	50.00 to 75.00	2.00 to 50.00	5.00 to 150.00	..... to 50.00	3.00 to 50.00
Calla sprn	.25 to .50	..... to .25	50.00 to 75.00	2.00 to 35.00	25.00 to 50.00	..... to 75.00	3.00 to 50.00
Pom Pons	.50 to 1.00	..... to 1.00	4.00 to 60.00	35.00 to 75.00	..... to .....	..... to	50 to 1.00
Bonaffon	1.00 to 5.00	..... to .....	..... to .....	..... to .....	..... to .....	..... to .....	..... to
Calendulas	1.50 to 5.00	1.00 to 15.00	5.00 to 5.00	3.00 to 4.00	2.00 to 6.00	..... to .75	3.00 to 4.00
Carnations	6.00 to 8.00	1.00 to 3.00	8.00 to 10.00	6.00 to 8.00	3.00 to 5.00	8.00 to 10.00	4.00 to 5.00
Chrysanthemums	.50 to 6.00	4.00 to 35.00	15.00 to 50.00	5.00 to 4.00	15.00 to 4.00	3.00 to 4.00	8.00 to 40.00
Calla	2.00 to 4.00	..... to .....	..... to .....	..... to 25.00	1.00 to .30	..... to 3.00	25.00 to 35.00
Ferns, Hardy	1.50 to 2.00	..... to .....	..... to	3.00 to 15.00	.15 to .20	..... to 2.00	..... to 1.00
Ga. ax leaves	..... to 2.00	15.00 to 2.00	..... to	15.00 to 20.00	..... to .....	..... to 1.50	1.00 to 2.50
Marguerite	.75 to 3.00	..... to	2.00 to 3.00	..... to	125.00 to 150.00	..... to 2.00	6.00 to 8.00
Narcissus	..... to 4.00	.50 to 1.50	..... to 6.00	5.00 to 6.00	..... to	5.00 to 6.00	100.00 to 25.00
Orchids Cattleyas	75.00 to 150.00	..... to	100.00 to 2.00	..... to 200.00	..... to	25.00 to 150.00	..... to
Orchids C. priediums	..... to .75	..... to	25.00 to 50.00	15.00 to 2.00	20.00 to 25.00	..... to	2.00 to 3.00
Sweet Peas	2.00 to 4.00	1.00 to 1.50	2.00 to 4.00	..... to 2.00	2.00 to 3.00	..... to .....	..... to 8.00
Snap Dragon	.50 to 2.00	.50 to 2.00	10.00 to 20.00	10.00 to 15.00 to	8.00 to 12.00 to 2.50
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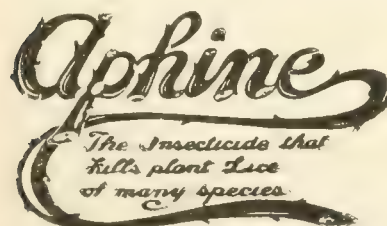
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Have a goodly supply of such plants as small ferns, variegated grasses, coleus, anthericums, achyranthes, asparagus plumosus, crevilla robusta, or any other plants that will be attractive when made up. Among other plants also have on hand plenty of three-inch, four-inch and five-inch begonias of the semper florens type, small cherries, primulas, etc. This last constitutes a few plants that can be used in filling six-inch, seven-inch or eight-inch pans which bring a ready sale.

Individual plants do not appeal to every Christmas buyer. There is a great demand for table centres at this season, which must have a dash of color. There is hardly a limit to the amount that can be sold at Christmas and they are just what many people want. Without doubt there are many customers who buy fine cyclamen, poinsettias or expensive baskets, but I think 75 per cent of the buying public want plants from \$1.00 to \$3.00 in price. The suggested inexpensive subjects will meet this business entirely.

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If your baskets are on hand do not hesitate to fill them immediately, as the plants become established and grow into their places naturally, which greatly aids their appearance by the time they are on sale. Every grower of course knows enough to have plenty of plants, such as cyclamen poinsettias, cherries, Lorraine begonias and primula obconicas.

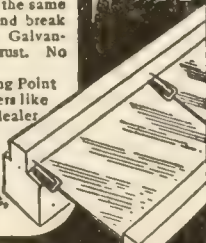
Watch the cyclamen closely now for dampness in the crowns. This is the greatest enemy with which the grower has to contend at this time, and will ruin many valuable plants if not attended to almost every day.

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HORTICULTURE

Vol. XXX

DECEMBER 20, 1919

No. 25

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"	5-in.	4.50	35.00	325.00
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NATIONAL PUBLICITY CAMPAIGN.

As we approach the close of the year, the committee looks back upon the work accomplished with a great deal of satisfaction. Our Publicity Campaign has certainly produced wonderful results, results in which the whole trade has shared. The movement of flowers and plants has been most active. No gluts have been reported in our markets, and the demand for our products has been greatly increased, in spite of a higher range of prices which has all along existed.

Our slogan "Say it with Flowers" has gained the popular approval of the people, and is being quoted liberally outside our own field. It is being featured by our literary men and women, and it is being sung by concert artists the country over. Our florists—the progressive ones—are using it at every opportunity, and realize its value to them as a medium for suggestion. Daily it is growing in use, and bids fair to rival in popularity the best slogan ever devised, and perhaps overshadow

This condition was foreseen by our Publicity Committee—and it was realized through the generous support of only part of those most interested. When the committee started to raise a fund of \$100,000 for this year's work, they confidently believed this amount would be forthcoming. It was not. Barely more than half has been volunteered. As a consequence, the campaign, as laid out, has seen many departures from its plans. We have only got half as far as was intended. Those whose subscriptions have made the work possible are unanimously of the opinion that the money spent has been a most excellent investment—there has been abundant proof to warrant such an opinion.

But it would be interesting to know what the vast army of non-subscribers think about it all. Do they ever think of the benefit which this great campaign is producing for them? Are they willing, are they desirous that a certain body of generous men of their own craft should provide this benefit for them? Are they content to see

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their business conditions improve through the expenditures of others, and in which they have for many weary months been invited to join?

We put these questions at this time to all non-subscribers—this glorious Christmas time, when good will is so strongly accentuated, and the better selves of all of us respond to the appeals of conscience. Why not resolve to donate a small percentage of your Christmas profits to the Campaign Fund—your Campaign Fund, promoted in your interests, and productive of so much good for you? Thousands of dollars have been spent from the fund to make your Christmas business big. Put a little back—you owe it.

Life Memberships.

Practically only ten days remain in which to take out life memberships in the Society at the old rate of \$25.00. At the Detroit Convention it was unanimously voted to increase the annual dues from \$3.00 to \$5.00, and the life membership fee for members in good standing from \$25.00 to \$50.00, the increases to take effect from January 1, 1920.

The advantage in life membership at the present rate is obvious—in five years a member will have paid in annual dues what can now be made in one payment, forever relieving the member from the payment of further dues, besides removing the necessity for keeping track of annual subscriptions and the bother of making remittances. Many members consider it an honor to be on the life membership list, and point with pride to the handsomely framed and most impressive certificate, or diploma, which is issued to each life member.

Look at the matter in the light of an investment, and send me your cheque for \$25.00, if in good standing; if not in good standing, add your dues for 1919, making the cheque \$28.00. New members coming in as life members must pay \$30.00, the difference being the amount of initiation and first year's dues.

Owing to the large influx of life members, some little delay has been experienced in engrossing, framing and despatching certificates, but we are catching up with the work as fast as possible.

A new supply of life membership buttons has just been received and the same are being furnished at 75 cents each, and mailed on receipt of this amount at the Secretary's office.

JOHN YOUNG, Secy.

1170 Broadway, N. Y.

Dec. 13, 1919.

BULBS, Etc.

JAP. LILIES—Giganteum, Auratum, Rubrum, Melpomene, Roseum, Album.

VALLEY PIPS—Forcing grade, Dutch or German.

T. R. BEGONIAS—Single, separate colors or mixed, 2 sizes.

DUTCH BULBS—Narcissus, Tulips, etc.

Write for prices specifically stating requirements

McHUTCHISON & CO. THE IMPORT HOUSE

95 CHAMBERS STREET, NEW YORK

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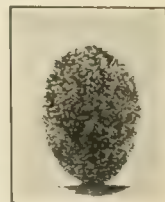
THE NEW HYBRID

HARDY PRIVET

(L. Ibota x Ovalfolium)



Ibodium Privet
Natural Habit



Ibodium Privet
When Trimmed

Now sent out for the first time. Inquire for further information. One year field grown plants; \$5.00 each; Summer rooted, frame grown, \$3.00 each; Plants in storage for immediate shipment. The Elm City Nursery Co., WOODMONT NURSERIES, INC., New Haven, Conn. Introducers of BOX-BARBERRY, well rooted summer frame cuttings—\$65.00 per 1000.

We are Headquarters for the BEST OF EVERYTHING
IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for future delivery.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue

CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg Boston, Mass

IF in need of RELIABLE NURSERY STOCK

that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**

Wholesale and Retail

NORTH ABINGTON, MASS.

CANNAS

A large stock of several varieties. PRICES RIGHT. Let us book your order now for shipment at any time.

PARKER BROS. NURSERY CO.

FAYETTEVILLE

ARKANSAS

CARNATION CUTTINGS

Booking orders for December 15, and later. We are well prepared to supply in quantity and our growers have a high reputation for the quality of cuttings produced for years past. Have made special arrangements to supply **Laddie, Morning Glow** and **Pink Delight** from clean stock plants grown only for propagation purposes.

New and Scarce Carnations

	100	1000		100	1000
ETHEL FISHER (Peter Fisher), scar-			MORNING GLOW	7.00	65.00
let	\$14.00	\$115.00	WHITE BENORA	7.00	65.00
BERNICE (Howard), crimson.....	14.00	115.00	PINK DELIGHT	7.00	60.00
RUTH BAUR	12.00	100.00	HERALD	7.00	60.00
LADDIE	10.00	90.00	ROSALIA	7.00	60.00

Aviator, Belle Washburn, Doris, Benora, Rosette, Enchantress Supreme, White Enchantress, Beacon, Ward, Good Cheer, White Perfection, White Wonder, Miss Theo—\$6.00 per 100; \$50.00 per 1000. Matchless, Nancy, Alice and Enchantress—\$5.00 per 100; \$40.00 per 1000.

GLADIOLUS BULBS

Brenchleyensis, Fire King, Independence, Klondike—\$30 per 1000. America, Augusta, Halley, Mrs. Francis King—\$35 per 1000. Delice (1¼)—\$35 per 1000. Chicago White—\$45 per 1000. Mrs. Frank Pendleton, Niagara, Peace—\$50 per 1000. Mrs. Watt (1¼)—\$50 per 1000. Baron Hulot, Panama—\$60 per 1000. Schwaben—\$70 per 1000.

New Primulinus Miranda, large flowers, 3 to 4 flower spikes per bulb, canary yellow color, light carmine markings—\$40 per 1000. XXX Special Mixture—\$30 per 1000. First Grade Mixture—\$25 per 1000.

For profit buy Primulinus Hybrids. We have them in quantity and of best selection. Don't forget Primulinus Hybrids average two to three blooms per bulb and are quick sellers in the market. Fancy, \$35 per 1000; regular, \$20 per 1000.

All first size except where noted.

Cash or satisfactory trade references. No C. O. D. Shipments.

L. J. REUTER CO. *Plant Brokers* 15 Cedar St., WATERTOWN STA.
BOSTON, MASS.



ANNOUNCEMENT

The New Crimson Carnation
for 1920

BERNICE

Orders filled in strict
rotation for December
and January delivery
STOCK LIMITED

WRITE FOR DESCRIPTIVE CIRCULAR

PRICE:

\$ 14.00 100
115.00 1000

W. D. HOWARD -- Milford, Mass.

HORTICULTURE

Vol. XXX

DECEMBER 20, 1919

No. 25

THE TALK OF THE TRADE

When one thinks of the different plants that have been offered the florist for quite a number of years back, it would be hard to find any introduction of greater value than the French Hydrangeas. This year their value is greater than ever before. We haven't many plants to select from for the Easter and general Spring trade. Pot Roses are in short supply. Practically no Azaleas are available, and in a general way we are short of desirable plants to offer. The French Hydrangea is filling the gap and I can

hardly imagine doing without them. I doubt if there has ever been a larger quantity sold than this season, but in spite of this, there does not seem to be enough to go around. The call continues heavy and while there is a small supply still offered they will surely clean up, as we are now getting close to the time when they must be started for Easter forcing. Of course Hydrangeas must be started slowly in order to get the best results. They will not stand any amount of heat until they are well budded and coming

along with a good strong root system. I will mention a few of the varieties which are very popular and known to be good forcers.

In white, there seems to be no use for any other if you can get Mme. E. Mouillere. It is free flowering, producing a big head and forces readily.

The only blue one I have seen that seems to come true is Mousseline, and this is a dandy fine variety. It is described as Plumbago Blue and we think this fits it very well. The flower heads are large and it is a very even grower and makes a very symmetrical plant when well grown.



Well Grown Specimen of French Hydrangea

Mme. Maurice Hamar is a good light pink, also easy to force and is early. Lillie Mouillere, a bright carmine rose is one of the best of the darker pink. Gen. De Vibraye is also an excellent rose pink and is one of the earlier forcing varieties. Bouquet Rose has always made good and is particularly valuable on account of its deep pink color. I don't think there is another of the pink flowering ones that carries a more pleasing shade.

While I don't like Avalanche as well as Mouillere, it would not be fair to omit that variety. Although a good many growers handle only Mouillere, I find some that would not be without Avalanche.

Of course there are other good forcing varieties, but I only mention a few of those which I find grown generally. Any of you who have not stocked up with French Hydrangeas for Easter trade will do well to buy as soon as you can. As I said before, there are still some to be had, but they probably will not last long. I know of one large plantsman who has for years supplied these in large quantities, sending out in some cases carload lots who has sold out clean for this season, and this is unusually early for this particular firm.

I have a number of times spoken of the Macaw Fern and have good reason to believe the many good things that are said about this variety, but I can't help adding just a little bit more on the keeping qualities. It certainly is a tough customer as it stands all kinds of abuse. L. J. Reuter showed me the other day a plant which he has carried around for about twelve weeks, during which time it has not been in the greenhouse to recuperate. It has been bumped around in an automobile, left in baggage rooms, out of doors on the piazza until it got too cold, and as a matter of fact has spent most of the time wrapped up in newspapers, and today that fern is a mighty nice specimen. It is of excellent color, no yellow or dead fronds; the only place where it shows its abuse is on the new tips.

A retail florist who to my mind is very much in luck is A. A. Pembroke, whose retail branch store is in Salem, Mass. He has one full bench of Cyclamen in excellent condition and just the ideal size for retail work. There are many who cannot dispose of the large, high-priced plants, and it isn't always that a grower is able to get the medium size with good foliage and plenty of bloom. Mr. Pembroke is known to be a success as a

carnation grower, but I must compliment him on his ability also as a plant grower. Besides the Cyclamen which were so well done, his Cincinnati and Melior Begonias were also of high class and he is offering a general line of plant stock for the holidays which would be very pleasing to any retail florist.

It is rather a surprising fact that stock which is much in demand in one city may be used hardly at all in another. In Boston, for example—very little use is made of forced lilac, but in Philadelphia, on the other, has a great liking for lilac. As a matter of fact, there seems to be no good reason why it should not be employed in the much larger way. One prominent dealer points out the merits of lilac as follows:

"We know of few flowers that can be handled to better advantage than White Lilac. It can be used in connection with most any other flower, and it will make a fine combination and a good showing. Lilac has always been considered an exclusive flower and will appeal to most any lover of flowers. It can be used to good advantage for basket work; in combination with other flowers for a table decoration. We have seen it used in funeral work. A few sprays in a wreath made out of Galax makes something different from what is generally offered by the retailer. It appeals to the buyer, and the retailer can always get a good price for his work.

"Valley is practically off the market at the present time, and lilac cer-

tainly makes a fine substitute for a bridal bouquet. There is a variety that is pure white, and an experienced florist can make very fine bridal bouquets by using lilac.

"Lilac is a flower that is not used as much as it should. So many of the retailers confine themselves to the staple flowers such as Roses, Carnations and Sweet Peas, and they do not realize it is necessary for them to always have those flowers in stock that are not in season all the year.

"Yet we know of retailers that are never without lilac. They would not carry lilac in stock, unless they found it a profitable flower for them to handle. It is not necessary for the retailer to buy lilac in quantity. If he would buy a small supply and add it to his daily display, there is no reason whatever that he will not dispose of it in a short time, and that he cannot get the price for it. Lilac always has better keeping qualities than a great many other flowers, and can be shipped safely within most any reasonable distance and arrive in perfect condition. It is very unusual to have a complaint on lilac arriving in bad condition."

It is interesting if a little tantalizing to read about the shipments of Belgian azaleas which have been coming into Canada. We think with regret of the days when similar shipments gladdened the hearts of American florists. Now, thanks to the paternalism of the Federal Horticultural Board we must cross the line to see these plants.

It is to be feared, however, that

DREER'S "Riverton Special" Plant Tubs



No.	Diam.	Ea.	Doz.
10	20 in.	\$3.25	\$37.50
20	18 in.	2.75	30.00
30	16 in.	2.25	26.00
40	14 in.	1.90	22.00
50	12 in.	1.50	15.00
60	10 in.	.95	10.50
70	8 in.	.75	8.25

The Riverton Tub is sold exclusively by us, and is the best ever introduced. The neatest, lightest, and cheapest. Painted green and bound with electric welded hoops. The four largest sizes are equipped with drop handles.

HENRY A. DREER Seeds, Plants, Bulbs and Supplies, 714-716 Chestnut St., Philadelphia, Pa.



CYPRESS GREENHOUSE STOCK

PECKY CYPRESS STOCK

NOT BED SASH

Ask for Circular D and Prices

THE A. T. STEARNS LUMBER COMPANY
NEPONSET, BOSTON

the azaleas from across the water reached the Dominion too late to be in flower by Christmas. Only one variety, Petrick has given any promise and that will not be in great abundance. By hard forcing, though, some of the growers hope to have Petrick ready for the Christmas trade.

The shortage of flowers is shown by the efforts being made to find new sources of supply. One of the Canadian papers discusses the Dominion invasion as follows:

A new rival to the Canadian retailer has appeared here in the persons of American florists, who, with motor trucks, do not hesitate to drive 50 to 75 miles for stock, and are to be frequently seen in this district. Apparently we Canadians do not as yet charge the high prices or else give better value for the money.

NASSAU COUNTY HORTICULTURAL SOCIETY

The annual meeting of this society was held in Pembroke Hall, Glen Cove, on Wednesday evening, Dec. 10th, Pres. Joseph Adler in the chair. James Barlow, James Allison, Simon Garden, Oscar Olson and John Henderson were elected active members and five petitions for active membership were received.

Pres. Adler appointed Henry Gaut, James MacDonald and H. Preston to judge the monthly exhibits and their awards were as follows: Pot of Paper White Narcissi, James McCarthy; three bunches of Celery, James McCarthy; twenty-five Brussels Sprouts, Thos. Henderson.

Since our last meeting, T. S. Smithers, one of our honorary members, passed away, and the secretary was instructed to write a letter of sympathy to Mrs. Smithers.

The annual report of the treasurer showed the society to be in a strong financial condition. The president appointed John T. Johnstone as chairman in charge of election and Henry Gaut and Ernest Westlake as tellers. Thomas Twigg was elected president, Mr. Millsted vice-president, Edward Harris secretary, E. J. Brown treasurer, Joseph Adler, trustee for three years, Arthur S. Cook corresponding secretary, and Messrs. Westlake, Henderson, Watson, Frampton, Smith, Young and Carter executive committee. Jack Everett acted as marshal at the installation of officers.

ARTHUR S. COOK, Cor. Secy.

FAMOUS WABAN ROSES

Grown and sold exclusively by

WABAN ROSE CONSERVATORIES

Roses at wholesale; shipped by express anywhere.

Kinds: Russell, Hadley, Ophelia, Premier, Thayer, Brilliant, Killarney, White Killarney. Contracts given for minimum deliveries daily or weekly, with protection in Holiday Seasons.

Write or telephone

Mention this Paper

BOSTON OFFICE, 15 BEACON STREET

HAYMARKET 800

CHRISTMAS PLANTS

Cyclamen, \$1.50 and up; Begonias, 75c to \$2 each; Poinsettias, single, 50c, 75c and \$1 each; pans, made up with Ferns and Peppers, \$1.50 to \$4 each.

FERNS, Scottii, Verona, Boston and Roosevelt, 50c to \$2 each.

FRANK EDGAR,

Waverley, Mass.

Flowers Under Glass

Using Sulphur.

It will be necessary to be a little more careful using sulphur now than it was formerly, as the houses will never get as much air as they have been getting. Naturally the fumes will be far more confined, and just that much more effective, and if they are made too strong they will bleach all the colored roses. If they are stronger yet, they are apt to harm the foliage. Therefore see that a little lime is added to the sulphur before it is used, and see that it is not applied in too large quantities. Last, but not least, see to it that there is not more than eight pounds of steam in the pipes, at the time the sulphur is applied, and continued until such a time as the sulphur is about burned up. If more than eight pounds of steam is used the pipes are sure to be too hot, and the sulphur will evaporate too rapidly, filling the houses up suddenly with strong fumes. This will likely prove disastrous to the plants, so growers be careful.

Lining the Boxes for Shipping.

It gets pretty cool now mornings, and if you would protect your flowers from frost it will be necessary to see that there is enough paper put into the boxes, especially so if these are wood, and are none too good as regards condition. Paper costs money, it is very true, but it is very poor

economy to save on this item, and lose much more on the goods. See to it that the boxes are lined well enough to protect them in any temperature that may be expected, and then see that they are packed right. Pack tight, but do not crush. If the stuff is packed loose it will shake around the boxes and get bruised before it reaches the market, where naturally it is handled once more, and packed for the retail store, often in not too gentle a way. It is no wonder that some customers will complain that stock was not fresh. Do not cut too tight, as stuff will not open. Let the buds get big, and keep in touch with your wholesaler. He can best tell you how to cut and ship to meet conditions necessary.

Primula obconica.

Primula obconica is another plant the value of which for florists' work should not be overlooked. Whether or not this plant should be sold in pots to the retail trade is a question. It seems to affect some people in much the same way as poison ivy and if anything of this sort happens the chances are that the florist will lose his customer and perhaps others besides. This does not detract, however from the value of this primrose for commercial work. The average greenhouse man has no trouble from the plant.

HORTICULTURE

Established by William J. Stewart in 1904

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No. 25

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 78 Devonshire Street, Boston, Mass.

EDWARD I. FARRINGTON, Editor.
 Telephone Fort Hill 3694

ADVERTISING RATES:

Per inch, 30 inches to page..... \$1.25
 Discount on Contracts for consecutive insertions, as follows:

One month (4 times), 5 per cent.; three months (13 times), 10 per cent.; six months (26 times), 20 per cent.; one year (52 times), 30 per cent.

Page and half page space, not consecutive, rates on application.

Entered as second-class matter December 8, 1904, at the Post Office at Boston, Mass., under the Act of Congress of March 3, 1897.

Our compliments to Secretary John Young, who was 51 on Wednesday and really just settling down to his life work. The New York Florists' Club would hardly know what to do without him, and few men even in the trade realize how well he is handling a prodigious task at headquarters. So with all the trade we wish him a Merry Christmas this year and for many years to come.

Christmas

In few lines of endeavor are people so closely associated with the business side of Christmas as the florists. There is a measure of satisfaction in this, too. It is pleasant to look in upon lives of the great human throng, to have an active part in making these lives happier and brighter for even a few days, and to feel that the holidays have been made more cheerful and more joyous by our efforts. This is mere sentiment, no doubt. When in the midst of seemingly endless work, with delays to test our patience and problems to vex our souls, we say to ourselves that if there is any merriment in the Christmas holiday making it is outside the florist's ken. But when it is over, and when we see the beaming faces, the happy throngs, and everywhere plants and flowers as the most potent emblems of the day, we feel a glow of pride and satisfaction such as comes to few.

If, incidentally, we can pat a fat purse and tell ourselves that the holiday season has brought us ample means for indulging in a little joy making on our own account, are we to be censured? By no means. If we can make other people happy and ourselves happy at the same time, we ought to congratulate ourselves on having a calling which makes such things possible.

And it has been a good season for the trade. It has not been just like past seasons. We have found ourselves without some kinds of material which we had come to count on in the past, but still we have worried along fairly well. We have seen flowers sold for more money than we ever dreamed that the public would pay. And we have seen a tremendously growing demand for potted plants, marking a tendency not to be overlooked another year.

If the retail florist is wise, he will take his note book in hand before the details of the season's business leaves his memory, and make careful entries concerning several points. He will make a note of the material which has sold best, and the amount which he has handled. He

will note down, too, the names of the growers or wholesalers from whom he has purchased material, with the condition of the stock and any useful comments which may come to him. Almost invariably ideas which might have been adopted to advantage if they had been thought of in time will come to the dealer even in the busiest hours. If possible let them be cherished until the opportunity arrives to jot them down, in order that they may be utilized next season. In this way one year may be made to serve another. To be sure, the brilliant thought of today may seem to lose its brilliancy after it has lain dormant until tomorrow, yet it sometimes happens that a vagrant idea when acted upon brings results not attained by hours of strained thinking. It must be acted upon at once, however, or else put down in black and white. It seldom lasts.

And so to the florist the Christmas season is one of toil and often of anxiety, a season when his business acumen is taxed to the limit, and yet it has its gentler side, its tender associations. To the trade in all sincerity, therefore, we wish a happy and a prosperous if not a merry Christmas.

Advertising

Florists of a generation ago would have stood aghast at the thought of using an entire page in one of the daily papers for advertising flowers. Yet such a proceeding no longer excites amazement. The other day Gude Bros. Co. of Washington bought a page in the Washington Post and used it to display one of the most effective advertisements which has come to our notice in a long time. The page was surrounded with copies of telegrams sent to other cities with orders for flowers and helped to bring home the value of the Florists Telegraph Delivery Association. The center of the page was filled with large type carrying the message of the Gudes themselves to a waiting public. The text in part was as follows:

"From every nook and corner of the world come the flower messages.

"—from every country, from every state these messages come in. By cable, by wireless, by telegraph; messages instructing us to remember 'them' to 'some one' with flowers.

"Thoughts—memories—know no distance—and when flowers are so easily telegraphed it isn't hard to express these thoughts in the language that *every one understands*.

"It has been our privilege to receive these messages from foreign countries and from every State in the Union. Hundreds and hundreds of Washington people have known through Gude Bros. what pleasure it is to be 'Remembered With Flowers' by some one far away.

"When your truest and deepest emotions for some one leave you dumb for words, remember how expressive and how easy it is to 'Say It With Flowers.'

"If there is 'some one' you want this message flashed to, just stop in, or phone the address. We have connections in every important city in America and in foreign countries."

We wonder if florists in general realize that while this form of advertising is paid for by Gude Bros., they reap much of its benefit. In this work what helps one helps all. The public learns that not Gude Bros. alone, but hundreds of others are telegraph florists. And so the great "Say It With Flowers" campaign gets another valuable boost.

MAX SCHLING'S ADVICE

What He is Saying About Prices and Business

Max Schling started an innovation in New York this season by substituting the following letter for a price list. It was sent to some 2,000 florists but doubtless there are many others who will be interested in Mr. Schlings views:

New York, December 16, 1919.

Gentlemen:

The wholesale price of flowers in New York is steadily increasing.

We are now paying for the best American Beauties \$1.25 each, for long stemmed Hadley roses 60 and 75c. each. Short stemmed roses range from 15c. to 20c. each, Carnations 12 and 15c. each, Violets vary between \$2.00 and \$3.00 a hundred, Orchids \$2.00 to \$2.50 each.

These are wholesale prices. What will they be at Christmas?

THEREFORE

MY PERSONAL ADVICE TO MY BROTHER FLORISTS IS

That when taking orders for small sums of money we must be careful what we promise. Irrespective of the present high cost we must give our customers satisfaction; we must consider that we need these customers not only for Christmas but all year, and have to take care of them, especially of those who cannot spend more than \$4 \$5 or \$6, and satisfy them the same way as those who spend \$25 and more. To enable us to take care of them properly please do try and take all orders for \$4, \$5 and \$6, open to our selection, so that we can give them either a plant or such flowers which not only represent the value of the money spent but which will also show to the best possible advantage.

Every order filled should be a credit to us and satisfactory to the customer.

With best wishes for a Merry and busy Christmas,

Yours fraternally,

MAX SCHLING.

DESTROYED BY HAIL

Last Summer a florist who had imagined he was outside of the hail section lost upwards of 50,000 square feet of glass by hail with no insurance to recompense him.

He is now a member of the Florists' Hall Association of America.

Profit by experience and join the Association now. Address

JOHN G. ESLEB, Secretary

Saddle River

New Jersey



FANCY & DAGGER FERNS

\$2.50 Per 1000

All Seasonable Cut Flowers Always on Hand. New Crop Bronze and Green Galaz Leaves.

Henry M. Robinson & Co.

WHOLESALE FLORISTS

2 WINTHROP SQ. AND 34 OTIS ST.,
BOSTON, MASS.

Telephones, Main 2439, 2616, 2617, 2618, 52144

GARDENERS' AND FLORISTS' CLUB OF BOSTON.

At the December meeting of the Gardeners' and Florists' Club of Boston held Tuesday evening, seven new members were admitted. It was voted to have a dance and buffet lunch in February. Mr. Arnold of the Fess Rotary Oil Burner Co. gave an interesting talk on the use of oil for heating greenhouses and afterwards answered many questions.

Officers for the ensuing year were elected at this meeting as follows: President, H. H. Bartsch; vice-president, Wm. H. Judd; secretary, Wm. N. Craig; treasurer, Sam J. Goddard; executive committee, Andrew K. Rogers, Patrick W. Burke, John R. Ness, Walter H. Golby and John L. Russell.

The awards were as follows: William Sim, collection of twenty varieties of carnations, cultural certificate of merit. This collection included quite a number of Mr. Sim's seedlings, Fairy, and J. Gordon receiving honorable mention, Romeo and Kiltie, seedlings, also showed up well.

Wm. F. Kasting Co., Buffalo, N. Y., exhibited Hamburg Late Pink Chrysanthemum, and was awarded honorable mention.

Wm. N. Craig showed a large variety of Stevia serrata, the tall variety, and was awarded vote of thanks.

Walter H. Golby received honorable mention for very large specimen plant of Begonia Cincinnati. He also showed Hamburg Late White and Golden Mistletoe Chrysanthemums, for which he received a vote of thanks.

James Wheeler showed a pink sport of Matchless Carnation, which showed up very well.

Pure Culture Mushrooms from E. B. Dane, Chestnut Hill, were awarded honorable mention.

BOSTON.

Rogers Flower Shop of Allston reports a constant increasing business. A new truck has recently been purchased and the store has just been remodeled and renovated. Mr. Rogers has also joined the Telegraph Delivery Association.

W. D. Howard's new Carnation Bernice scored 86 at the recent exhibition in New York City. Of course it was difficult to get size at this time of year. Growers and retailers were greatly pleased with the flower.

At the city election on Tuesday, John J. Cassidy, the florist at 6 Beacon street, made a good run for Councilor, but was defeated.

Samuel J. Goddard went to Hartford last week to talk to the Florists' Club about Carnations.

HARTFORD FLORISTS ELECT.

The Hartford Florist Club elected Joseph F. Coombs for president at their annual meeting. This is the fourth consecutive term for Mr. Coombs as president of this club. Other officers and committees chosen were: J. A. Brodrib, vice-president; George Marchant, secretary; W. W. Thompson, treasurer; executive committee, Paul Hubbard, Henry Voltz, George G. McClune; entertainment committee, Albert Linderner, George Marchant, Paul Hubbard; press, J. A. Brodrib.

Edwin C. Jellett has been elected president of the Germantown, Pa., Horticultural Society.

The plan of heating greenhouses with oil which is being practiced in the east is now being taken up by Charles P. Muller, of Wichita, Kans., who has equipped his plant so that he can heat it in part by oil if necessary.



"The Telegraph Florist"

Member of Florists' Telegraph Delivery

124 TREMONT ST.

BOSTON

H. F. A. LANGE

Worcester, Mass.

Delivers to all Points in New
England

150,000 Square Feet of Glass

Member Florists' Telegraph Delivery
Association

WORCESTER, MASS.

Randall's Flower Shop

HARRY I. RANDALL, Proprietor.
Member Florists' Telegraph Delivery

Providence, Rhode Island

Johnston Brothers

LEADING FLORISTS

38 Dorrance Street

Member Florists' Telegraph Delivery

Quality and Reliability
WARBURTON

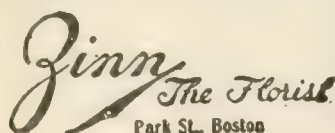
FALL RIVER, MASS.

Deliveries of Flowers and Plants
in FALL RIVER and contiguous
territory.

The Beacon Florist
Beacon Street, BOSTON

Near Tremont

J. EISMAN, Manager, 14 years head
decorator and designer for Penn's.
Prompt, Efficient Service Guaranteed.



Park St., Boston

Flowers by Telegraph

Leading Retail Florists Listed by
Towns for Ready Reference. Orders
transferred by telegram or otherwise
to any of the firms whose address is
here given will be promptly and prop-
erly filled and delivered.

Beverly, Mass.—Beverly Flower Shop
Boston—Penn the Florist, 124 Tremont St.
Boston—Zinn the Florist, Park St.

Brockton, Mass.—Belmont Flower Shop.
Boston, Mass.—The Beacon Florist,
Beacon St.

Brooklyn, N. Y.—Wilson, 3-5 Greene Ave.
Buffalo, N. Y.—S. A. Anderson, 410 Main
St.

Cambridge, Mass.—Harold A. Ryan
Cleveland, O.—J. M. Gasser Co., Euclid
Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Knoble Bros., 1834 W. 25th
St.

Cleveland, O.—The Smith & Fetters Co.,
735 Euclid Ave.

Denver, Col.—Park Floral Co., 1643
Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New
Boston Rd. and 38 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017
Grand Ave.

Lawrence, Mass.—A. H. Wagland.

Malden, Mass.—J. Walsh & Son.

New York—David Clarke's Sons, 2139-
2141 Broadway.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
Ave.

New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
Farnum St.

Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred C. Weber, 4326-28
Olive St.

Tarrytown-on-Hudson, N. Y.—F. R. Pier-
son Co.

Taunton, Mass.—Hall the Florist.

Toronto, Can.—J. H. Dunlop, 8-10 West
Adelaide St.

Washington, D. C.—Gude Bros., 1214 F
St.

Washington, D. C.—George H. Cooke,
Connecticut Ave. and L St.

Worcester, Mass.—H. F. A. Lange.

Worcester, Mass.—Randall's Flower Shop,
22 Pearl St.

CAMBRIDGE, MASS.

581 MT. AUBURN STREET

HAROLD A. RYAN, Inc.

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BROCKTON, MASS.

Belmont Flower Shop

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124 Tremont St., BOSTON, MASS.

Member Florists' Telegraph Delivery Association

FERNS FOR THE HOLIDAY TRADE.

While it may not be permissible to really call ferns a Christmas plant, they are growing so popular at all seasons of the year, that there is bound to be a good demand for them during the holiday season. Retailers should be prepared to meet this demand by having a good selection of choice specimens of the different varieties on hand, and also by displaying a few of each variety near the front of the store instead of crowding them away into a back corner or on a back shelf.

Nice grown specimens of the lace varieties can be secured in pans from five to ten inches in size. These, when tastefully decorated and nicely displayed, make a handsome Christmas gift. For small sizes, the verona variety makes a splendid plant. When grown in pans it makes a pretty table plant and is also a good keeper.

Another good variety for the Christmas trade is the holly fern, especially the large specimen. These are always sure to give satisfaction and command good prices, more especially if displayed with Christmas trimmings.

In the dwarf varieties, Teddy Junior is the best. This is a splendid keeper, and when grown well will stand much abuse. For a moderately-priced fern this is the best and always meets with good demand, especially for the small sized homes and apartment houses.

The real Christmas fern, however is the Boston and Roosevelt varieties. These can be secured in the different sizes, though the most popular one seems to be the Finch. It will retail anywhere from four to ten dollars apiece. A few choice specimens will reach as high as fifteen dollars each. A few of our leading retailers always carry some of these specimens as

they always find a customer wanting something out of the ordinary and willing to pay a good price. From past experiences, there appears to be more demand for the large specimens at Christmas than at any other season.

In the cheaper class, well-filled fern dishes make pretty Christmas gifts, especially when tastefully filled with the different varieties of pteris ferns. Single specimen ferns can be used in many ways in filling baskets and small boxes. These should be secured and filled immediately and allowed to remain a few weeks to get established before Christmas.

In buying your ferns don't get cheap plants, as a poor plant is not wanted at this season of the year. Wherever you buy, however, place your order early, as there has been a greater demand for ferns this fall than ever before.

Be sure to buy pot-grown plants, as those torn out of the bench and the roots crowded into small pots are dear at any price. Their days are very limited when once they enter the homes with hot, dry atmospheres.

One of the best points in using ferns for the holiday trade is that they are easily handled and seldom suffer during the delivery, if they receive ordinary care.—*Canadian Florist*.

Mrs. Linda Foster Howard has sold to Stanley Kaczor the flower store and business at 244 Main street, Woonsocket, R. I., known as "Vose, the Florist." This business has been conducted for many years by Alonzo W. Vose and Mrs. Howard, the latter retiring Dec. 1.

Charles B. Stow is opening a new flower shop at Naugerties, N. Y.

S. C. Derrick has started a flower store at Oneonta, N. Y. Mr. Derrick is a well known florist of Cooperstown.

TRANSPLANTING COTONEASTERS.

Easily Done if a Few Simple Points Are Observed.

Some of the most beautiful shrubs introduced to gardens during recent years are the Cotoneasters and it seems unfortunate that a misapprehension exists among some of the nurserymen that these plants are difficult to transplant. The suggestion is fallacious as experience at the Arnold Arboretum has proved where they have been moved many times with no ill effects, both very large plants as well as small ones.

The most important points to observe are that while above ground the roots must never become dry, and if the plants are large many of the older branches should be cut back well towards the base, preferably to some of the slender shoots which originate there. Small plants from the nursery are better for this treatment also. Severe pruning at the time of transplanting is the secret of success and if done in spring within a year or two these plants will make very presentable subjects worthy of a place in every garden. Unfortunately many purchasers of these plants are afraid to do this on receiving them, and if left that way we admit they take some time to recover.

Some of the Cotoneasters are beautiful in flower and fruit, such as *C. multiflora calocarpa* and *C. racemiflora soongarica*; others are beautiful in flower and not so showy in fruit, such as *C. hupehensis*; while such ones as *C. horizontalis* and *C. divaricata* are most attractive while in fruit; and within a very few years some of these should be decorating the shrubbery border of every lover of ornamental flowering and fruiting shrubs.

W. H. JUDD.

Arnold Arboretum,

Jamaica Plain, Mass.

THE FLORISTS' TELEGRAPH DELIVERY ASSOCIATION

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McCauslen Floral Co., 58 E. Mill St.
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The Park Flower Shop Co., 109 S. Main St.
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Stulbs Nursery.
- AUGUSTA, MAINE.**
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A. N. Kinsman.
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Hillyer's for Flowers, 1406 Lavaca St.
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Robert L. Graham, 854 W. North Ave.
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Charles E. Smith & Co., 207 N. Liberty St.
- BANGOR, MAINE.**
Mrs. T. Allen, 9 Hammond St.
- BARBERTON, OHIO.**
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- BERKELEY, CAL.**
Wm. F. Norton, 2227 Shattuck St.
Pacific Floral Co., 2109 University Ave.
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Strout's, 317 Alfred St.
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- BILLINGS, MONT.**
Partington's Greenhouses.
- BINGHAMTON, N. Y.**
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- John J. O'Brien, 67 Beacon St.
Henry Penn, 124 Tremont St.
Wax Brothers, 143 Tremont St.
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J. M. Johnston, 621 Braddock Ave.
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The Rosery, 88 Dalhousie St.
Waldron's Florist, 101 Colborne St.
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Hopkins The Florist, 118 Main St.
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Dinkel Flower Shop, 25 W. Walnut St.
BRIDGEPORT, CONN.
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BRISTOL, PA.
J. C. Schmidt, Otter and Maple Sts.
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Bristol Floral Co., 114 Pennsylvania Ave.
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Belmont Flower Shop, 25 Belmont Ave.
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BROCKVILLE, ONT.
Edwards Florist, 111 E. King St.
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John V. Phillips, 7 Clinton St.
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cade, Market Ave., N.
CARBONDALE, PA.
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Byer Bros.
CHAMPAIGN, ILL.
Thomas Franks & Son, 112 N. Nell St.
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Bertha B. Newby, 713 N. 7th St.
CHARLESTON, S. C.
Carolina Floral Store, King & George Sts.
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CHARLESTON, W. VA.
Charleston Cut Flower & Plant Co., 19
Capitol Ave.
Winter Floral Co., 811 Quarrier St.
CHARLOTTE, MICH.
R. A. Wietzke, 620 W. Harris Ave.
CHARLOTTE, N. C.
Scholtz, The Florist, Inc., 306 N. Tyron St.
The Flower Shop, 203 N. Tyron St.
CHARLOTTEVILLE, VA.
Lankford's Flower Shop, 101 W. Main St.
CHATHAM, ONT.
W. McK. Ross Sons, 119 W. King St.
The Rosery, 38 King St., W.
CHATTANOOGA, TENN.
W. F. Haeger, 700 Market St.
Joys, 721 Market St.
CHEYENNE, WYO.
Underwood Flower Shop, 122 W. 17th St.
CHICAGO, ILL.
Alba Floral Co., 146 S. Wabash Ave.
Paul Blome & Co., 1361 N. Clark St.
Bohannon Floral Co., 57 E. Monroe St.
H. N. Bruns, 3040 Madison St.
Fleischman Floral Co., 84 E. Jackson Blvd.
Oscar B. Friedman, 516 S. Michigan Ave.
J. F. Kidwell Co., 3530 Michigan Ave.
August Lange, 77 E. Madison St.
Lewis & Rocca, 55 E. Jackson Blvd.
Mangel, The Florist, 17 E. Monroe St.
Chas. T. Neiglick, 834 N. State St.
Everett R. Peacock Co., 4013 Milwaukee
Ave.
Samuelson, 2132 Michigan Ave.
Schiller The Florist, 2221 W. Madison St.,
4509 Broadway.
W. J. Smyth, 3102 Michigan Ave.
Ernest Weinhoeber Co., 22 E. Elm St.
George Wienhoeber, 41 S. Wabash Ave.
The Geo. Wittbold Co., 737 Buckingham
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CHICKASHA, OKLA.
Mrs. Stella Johnston, 628 Fifth St.
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William Paul, 62 Grape St.
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CINCINNATI, OHIO.
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Edward A. Forter, 128 West 4th St.
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Hayman Greenhouse Co., 411 W. Main St.
The H. Weber Sons Co., Gore Bldg., Pike
St.
CLARKSVILLE, TENN.
Joy's.
CLEARFIELD, PA.
Mrs. Wm. Blacker, 19 3rd St.
CLEVELAND, OHIO.
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A. Graham & Son, 5523 Euclid Ave.
Paul C. Hahn, 10515 Superior St.
The Jones-Russell Co., 1284 Euclid Ave.
Kirchner Flowers, Quincy at E. 67th St.
Knoble Brothers, 1836 W. 25th St.
G. W. Mercer, 2991 W. 25th St.
The Park Flower Shop Co., 144 Public Sq.
Wm. H. Temblett, 10313 Euclid Ave.
Westman & Getz, 5923 Euclid Ave.
Withuhn's Flower Shop, 3600 W. 25th St.
CLIFTON SPRINGS, N. Y.
F. R. & J. R. Tomlinson, Kendall St.
CLINTON, ILL.
Grimsley's Flower Store.
CLINTON, IOWA.
Andrew Bather Co., 210 6th St.
CLINTON, MASS.
Frank P. Sawyer, 125 High St.
CLYDE, OHIO.
Hall's Greenhouse, cor. Maple & Race Sts.
Arthur Doebel & Sons.
COATESVILLE, PA.
Thomas Flower Room, 247 E. Main St.
COHOES, N. Y.
Ansel D. Carpenter, 59 Remsen St.
COLDWATER, MICH.
D. Vogt's Greenhouses.
COLORADO SPRINGS, COLO.
Frank F. Crump.
Pikes Peak Floral Co.
The Cheyenne Floral Co., Broadmoor
Hotel.
COLUMBIA, S. C.
Mrs. J. M. Elson, 1234 Pickens St.
COLUMBUS, GA.
J. T. Keheley, Florist, Brown St.
Smith's Greenhouses.
COLUMBUS, IND.
Chas. S. Barnaby, 428 Fifth St.
COLUMBUS, OHIO.
Franklin Park Floral Co., 1335 Fair Ave.
T. J. Ludwig, 82 N. High St.
The Munk Floral Co., 19 S. High St.
CONCORD, N. H.
Solon R. Baker, 28 Pleasant St.
CONNEAUT, OHIO.
L. A. Eaton & Sons, 223 Broad St.
CONNELLSVILLE, PA.
P. R. DeMuth & Sons, 111 E. Crawford
Ave.
CORNING, N. Y.
Bacalles Flower Shop, 8 W. Market St.
A. H. Woepel, Park Ave.
CORSICANA, TEXAS.
Alfred Holm.
COSHOCOTON, OHIO.
S. M. Hamilton & Sons, 306 S. 10th St.
COUNCIL BLUFFS, IOWA.
J. F. Wilcox & Sons, 530 W. Broadway.
COVINGTON, KY.
Robert D. Ruttle, 822 Madison Ave.
CRAWFORDSVILLE, IND.
McDonald & Co., 126 W. Main St.
CUMBERLAND, MD.
John Paul, 56 N. Center St.
DALLAS, TEXAS.
Dallas Floral Co., H. F. Greve, Prop.,
Ross and Masten Aves.
Lang Floral & Nursery Co., 1214 Main St.
DANIELSON, CONN.
Franklin & Crosby, Inc., 8 Academy St.
DANVILLE, ILL.
Britz, The Telephone Florists, 211 S. Bow-
man Ave.
F. B. Smith's Sons, 101 N. Vermillion St.
DANVILLE, PA.
T. J. LeDue, 302 Bloom St.
DANVILLE, VA.
Eldridge Stores, Inc., Arcade Bldg.
DAVENPORT, IOWA.
Bills Floral Co., 104 W. 2nd St.
G. F. Forber, 313 Brady St.
DAYTON, OHIO.
The Helss Co., 112 S. Main St.
Matthews, The Florist, 16-18 W. 3rd St.
J. W. Rodgers, 3rd and Jefferson.
DAYTONA, FLORIDA.
Triple Cities Floral Co., P. O. Box 368.
DECATUR, ILL.
Daut Brothers, 120 E. Prairie Ave.
Peterson Floral Co., 402 Water St.
DEFIANCE, OHIO.
Winfield S. Kircher, 1119 Jefferson Ave.
DEKALB, ILL.
J. L. Johnson, 311 E. Lincoln Highway.
DELAWARE, OHIO.
Jos. H. Cunningham, 325 W. William St.
DENVER, COLO.
American Flower Shop, 1017 16th St.
Geo. H. Cooper, 833 15th St.
Mauff Floral Co., 1225 Logan St.
The Park Floral Co., 1643 Broadway.
DERBY, CONN.
H. M. Bradley, 113 New Haven Ave.
DES MOINES, IA.
Alpha Floral Co., 7th and Walnut Sts.
Art Floral Co., 515 Grand Ave.
H. E. Lozier, 521 E. Locust St.
J. S. Wilson Floral Co., 35th and Inger-
soil Aves.
DETROIT, MICH.
The L. Bomb Floral Co., 153 Bates St.
John Breitmeyer's Sons, 26 Broadway.
Wm. B. Brown, 330 Woodward Ave.
Carey, The Florist, 491 Woodward Ave.
Central Floral Co., 35 Broadway.
E. A. Feters, 17 E. Adams Ave.
Charles H. Plumb, 1430 Burns Ave.
Scribner Floral Co., 604 E. Fort St.
Jerome K. Stock, 518 W. Warren Ave.
J. F. Sullivan, 361 Woodward Ave.

Gust H. Taepke Co., 95 Gratiot Ave.
 Gust H. Taepke Co., 450 Elmwood Ave.
DIXON, ILL.
 Dixon Floral Co., 117 E. First St.
DOTHAN, ALA.
 Dothan Floral Co., 134 N. Foster St.
DOVER, N. H.
 Mender's Flower Shop, 6 Third St.
DOVER, N. J.
 Herrick, Baker Theatre Annex.
DU BOIS, PA.
 Wm. G. Jones.
DUBUQUE, IA.
 Harketts Floral Co.
DULUTH, MINN.
 Duluth Floral Co., 121 W. Superior St.
DUNKIRK, N. Y.
 Wm. Schwan & Son, 58 E. 4th St.
DUNMORE, PA.
 Schultheis Florist, 317 Church St.
DUQUESNE, PA.
 J. M. Johnston, 21 Grant Ave.
DUQUOIN, ILL.
 William L. Thill, 730 N. Washington St.
DURHAM, N. C.
 Durham Floral Co., 118 E. Main St.
 J. J. Fallon.

EAST LIVERPOOL, OHIO.
 The Chal. Peterson Co., Cor. 5th and Market Sts.

EASTON, PA.
 Charles H. Buening, 1900 Lehigh St.

EAST ORANGE, N. J.
 Henry Hornecker, 75 Central Ave.
 Relchey & Lake, 373 Main St.
 Geo. Smith & Sons, 557 Main St.

EAST ST. LOUIS, ILL.
 Grimm & Gorly, 111 Connellsville Ave.

EAST WEYMOUTH, MASS.
 M. P. Ford, 67 Raymond St.

EAU CLAIRE, WIS.
 A. F. T. Lauritzen.

EDMONTON ALBERTA, C.
 The Emery Floral Co.

EDWARDSVILLE, ILL.
 J. F. Ammann Co., 1308 St. Louis St.

ELGIN, ILL.
 George Souster, 158 Du Page St.

ELIZABETH, N. J.
 Henry Leahy, 1169 E. Jersey St.

ELKHART, IND.
 West View Floral Co., 525 S. Main St.

ELLSWORTH, ME.
 Mrs. M. A. Clark, Park St.

ELM GROVE, W. VA.
 John Dieckmann.

ELMIRA, N. Y.
 LaFrance Florist, 100 E. Water St.

EL PASO, TEXAS.
 Potter Floral Co., Mills Building.

EL RENO, OKLA.
 Preston Floral Co., 207 S. Rock Island.

ELYRIA, OHIO.
 Elyria Flower Shop, 224 Middle Ave.
 Heacock Floral Co., 333 E. Broad St.

ENID, OKLA.
 Enid Floral Co., 212 W. Randolph St.

ENGLEWOOD, N. J.
 Edw. G. Burrows, 57 Dean St.
 Meadow Brook Nurseries, Inc., 275 Grand Ave.

ERIE, PA.
 John V. Laver, 704 State St.
 Miles R. Miller, 924 Peach St.
 The Schluraff Floral Co., 30 W. 8th St.

ESCANABA, MICH.
 C. Peterson & Sons, 202 S. Birch St.

ESSEX FALLS, N. J.
 Henry Rudolph, 289 Roseland Ave.

EVANSTON, ILL.
 Fischer Brothers, 614 Dempster St.
 M. Weiland, 602 Davis St.
 John Weiland, 1614 Sherman Ave.

EVANSVILLE, IND.
 The Wm. Blackman Floral Co., 522 Main St.

EVERETT, WASH.
 Everett Floral Co., 1814 Hewitt Ave.

EXETER, N. H.
 John R. Perkins, 23 Lincoln St.

FAIRBURY, NEB.
 C. M. Hurlburt, Fairbury Nurseries.

FAIRMONT, W. VA.
 Hauge Flower & Plant House, Ridgely and Floral Aves.
 The H. Weber Sons Co., 118 Main St.

FALL RIVER, MASS.
 C. Warburton & Sons, 33 N. Main St.

FARGO, N. D.
 Shotwell Floral Co.
 Smedley Floral Co., 69 Broadway.

FARIBAUT, MINN.
 Clarine Bros., W. 7th St.

FAR ROCKAWAY, N. Y.
 H. Bergman, 232 Central Ave.

FAYETTEVILLE, ARK.
 Adams & Son, 18 W. Center St.

FAYETTEVILLE, N. C.
 Sunnyside Floral Nursery.

FINDLAY, OHIO.
 J. J. Waaland, 140 Larken St.

FITCHBURG, MASS.
 Lesure, The Florist, 5 Putnam Ave.
 W. H. Ritter, 169 Main St.

FLINT, MICH.
 D. P. Smith Floral Co., 201 E. Kersley St.
 Husselbring Florist, 623 S. Saginaw St.

FLORENCE, S. C.
 DeWitt House, Palmetto Nurseries.

FLUSHING, N. Y.
 Ralph Hall, 2 Jamaica Ave.

FOND DU LAC, WIS.
 The Haentze Co., 414 Linden St.

FORT ATKINSON, WIS.
 Cloute Bros., 600 Riverside Drive.

FORT COLLINS, COLO.
 The Espelin Floral Co., 111 E. Oak St.

FORT DODGE, IA.
 Atwell Florist.
 Elmer E. Nordwall, 10 S. 11th St.

FORT MADISON, IA.
 J. M. Auge, 8th and Broadway.

FORT MORGAN, COLO.
 Morgan Floral Co.

FORT SMITH, ARK.
 George Rye, The Plaza.

FORT WAYNE, IND.
 Blossom Floral Co., 110 West Wayne St.
 Flick Floral Co., 207 W. Berry St.
 Lantermier, Florist, 1203 Calhoun St.
 The Vesey, 2602 Thompson St.

FORT WORTH, TEXAS.
 Baker Bros. Co., Inc., 1013 Houston St.
 Drumm Seed & Floral Co., 507 Houston St.
 J. E. McAdam.

FOSTORIA, OHIO.
 Fostoria Floral Co., 800 N. Main St.

FRAMINGHAM, MASS.
 S. J. Butterworth, 2 Clinton St.
 S. J. Goddard, 37 Main St.

FRANKFORT, IND.
 H. O. Meikel, 358 Barner St.

FRANKLIN, IND.
 J. E. Hitz, 290 S. Main St.

FREDERICK, MD.
 C. Hermann & Son.

FREDONIA, N. Y.
 Schwan's Florist.

FREEPORT, ILL.
 John Bauscher, 104 Chicago St.
 Freeport Floral Co., 83 Stephenson St.

FREMONT, OHIO.
 Horn Floral Co., 912 Croghan St.
 Frank B. Leshner, 109 S. Front St.

GADSDEN, ALA.
 Miss Stocks, Stocks Bldg., Chestnut St.

GAINESVILLE, GA.
 J. E. Jackson, Prop., Piedmont Greenhouses.

GALESBURG, ILL.
 I. L. Pillsbury, 65 E. Locust.

GALLIPOLIS, OHIO.
 Mrs. Ed. Morgan, 415 Third Ave.

GARDNER, MASS.
 A. I. Colburn, 68 Graham St.

GENEVA, N. Y.
 Trautman & Smith, 149 N. Exchange St.

GEORGETOWN, KY.
 Alex. Hassloch.

GIBSON CITY, ILL.
 Peterson Floral Co.

GLENS FALLS, N. Y.
 Crandell's Flowers, 2 Harrison Ave.

GLOVERSVILLE, N. Y.
 Peck Floral Co., 59 N. Main St.

GOLDSBORO, N. C.
 Goldsboro Floral Co., Cor. Virginia and Ash Sts.

GORHAM, MAINE.
 Barrows Greenhouses.

GOSHEN, IND.
 Colonial Flower Shop, 302 S. Main St.

GRAND FORKS, N. D.
 Grand Forks Floral Co., 307 Demeres Ave.

GRAND ISLAND, NEB.
 Williams, The Florist, 118 S. Locust St.

GRAND RAPIDS, MICH.
 Arthur F. Crabb, 13 Jefferson Ave.
 Eli Cross, 150 Monroe Ave.
 Freyling & Mendels, 1058 Wealthy St.
 Harnett Flower Shop, 19 Park St., N. E.
 Henry Smith, Monroe and Division Sts.

GRAND RAPIDS, WIS.
 Henry Ebsen, Saratoga St.

GREAT BARRINGTON, MASS.
 Edward E. Dolby.

GREAT FALLS, MONT.
 Electric City Conservatories, 1409 5th Ave., N.

GREEN BAY, WIS.
 DeClerc's Flower Shop, 213 N. Washington St.
 Meier-Schroeder Co., 119 N. Washington St.

GREENFIELD, MASS.
 Charles A. Thayer, 56 Sanderson St.

GREENCASTLE, IND.
 John Eitel & Son, Vine St.

GREENSBORO, N. C.
 Van Lindley Co., 115 E. Elm St.

GREENSBURG, IND.
 Ira Clark, S. Broadway.

GREENSBURG, PA.
 Joseph Thomas, 200 N. Main St.

GREENVILLE, MISS.
 Idle Hour Floral Co., 701 Percy St.

GREENVILLE, OHIO.
 Frost & Spence, 748 Sweetzer St.

GREENVILLE, PA.
 Wm. Baird & Son, 18 Rosedale Ave.

GREENVILLE, S. C.
 Glibbreath-Durham Co., 208 S. Main St.
 Graceland Greenhouses, 400 S. Main St.
 Mauldin Flower Shop, Ottaray Hotel.

GREENVILLE, TEXAS.
 Wise Adkisson, 1615 Walnut St.

GREENWICH, CONN.
 MacMillen & Co., 323 Greenwich Ave.

GRINNELL, IOWA.
 Kemble Floral Co.

GULFPORT, MISS.
 Ed. Heeck, 14th St.

GUTHRIE, OKLA.
 Furrow & Co., 208 E. Oklahoma St.

HACKENSACK, N. J.
 Herrick, 404 Center St.

HACKETTSTOWN, N. J.
 Alfred Whitley, 196 Main St.

HAGERSTOWN, MD.
 Henry A. Bester & Sons, 40 E. Baltimore Ave.

HALIFAX, NOVA SCOTIA.
 Frazer Floral Co., Ltd., 24 Fenwick St.

HAMILTON, OHIO.
 John Lodder & Sons, 161 Bachett St.

HAMILTON, ONT.
 John Connors Co., Ltd., 69 E. King St.
 The "Arbor" Florist, 113 E. King St.

HAMMOND, IND.
 Arthur Schutz, 188 E. State St.

HANCOCK, MICH.
 Dale & Nicholas.

HANNIBAL, MO.
 Griffen's Flower Shop, 303 Broadway.

HARRISBURG, ILL.
 Albert Harris, 105 E. Poplar St.

HARRISBURG, PA.
 The Berryhill Nursery and Floral Co., Locust St. and Second.
 Keeney Flower Shop, 814 N. 3rd St.
 F. E. Ridenour, 1221 N. 3rd St.
 Charles Schmidt, 313 Market St.

HARTFORD, CONN.
 J. Albert Brodrib, 639 Main St.
 John F. Coombs, 741 Main St.
 John F. Coombs, 364 Asylum St.
 Lane, The Florist (Successor to Welch, The Florist), 180 Asylum St.
 Geo. G. McCluney, 165 Main St.
 Spear & McManus, 242 Asylum St.

HARTFORD CITY, IND.
 R. M. Henley.

HAVERHILL, MASS.
 Kaulbach, Florist, 28 Main St.

HAZELTON, PA.
 Geo. H. Seldel, 231 W. Broad St.
 Smith Floral Co., 107 E. Broad St.

HELENA, ARK.
 Ball Floral Co.

HELENA, MONT.
 State Nursery & Seed Co., 328 Fuller Ave.

HENDERSON, KY.
 Morgan Floral Co., 110 Second St.

HENDERSON, N. C.
 Henderson Flower Shop.

HIGHLAND PARK, ILL.
 Highland Park Greenhouses.

HIGHLAND PARK, MICH.
 Highland Park Florists, 2571 Woodward Ave.
 Holznagle's, 2570 Woodward Ave.

HIGH POINT, N. C.
 Frank H. Ford, Willoubar Terrace.

HILLSBORO, TEXAS.
 M. C. Wood Seed & Floral Co., Cor. Elm and Covington Sts.

HILLSDALE, MICH.
 Otto A. Stoll, River and Spring Sts.

HOBOKEN, N. J.
 J. Grullich & Sons, 616 Washington St.
 Fred A. Heffner, 914 Washington St.

HOLYOKE, MASS.
 Galloway Brothers, 500 Dwight St.

HOMESTEAD, PA.
 J. M. Johnston, 131 E. 8th Ave.

HOPKINSVILLE, KY.
 T. L. Metcalfe, 7th St.

HORNELL, N. Y.
 Wettlin Floral Co.

HOT SPRINGS, ARK.
 Housley Flower Shop, 366 Central Ave.
 Johnson Floral Co., 232 Central Ave.

HOUGHTON, MICH.
 Dale & Nicholas, Sheldon St.

HOULTON, MAINE.
 H. L. Chadwick, 16 High St.

HOUSTON, TEXAS.
 Boyle & Pendervis, 721 Main St.
 Paul M. Carroll, 922 Texas Ave.

HUDSON, N. Y.
 Allen Greenhouses, 36 Greene St.
 The Forest Flower Shop, 437 Warren St.

HUNTINGTON, W. VA.
 McClure-Coffman.

- HUNTINGTON, IND.**
A. G. Bieberlich, 513 N. Jefferson St.
- HUNTSVILLE, ALA.**
John Scott, 5th St.
- HUTCHINSON, KANS.**
Smith's Flower Shop, 18 N. Main St.
- ILION, N. Y.**
Theodore H. Schesch & Son, 132 E. Main St.
- INDEPENDENCE, KANS.**
Wm. Hasselmann, 10th and Railroad Sts.
- INDIANAPOLIS, IND.**
Bertermann Bros. Co., 241 Massachusetts Ave.
- A. Weigand's Sons Co., 1610 N. Illinois St.**
- IONIA, MICH.**
Byron L. Smith, 323 Lafayette St.
- IOWA CITY, IOWA.**
J. Aldous & Sons, 112 S. Dubuque St.
Prince's Flower Shop, 26 S. Clinton St.
- IRON MOUNTAIN, MICH.**
Eskils Greenhouses.
- IRONTON, OHIO.**
Weber Bros., 1501 S. 6th St.
- IRONWOOD, MICH.**
R. Lutey, Cor. Ayer and Mansfield Sts.
- ISHPEMING, MICH.**
Ishpeeming Greenhouses, 7 No. Third St.
- ITHACA, N. Y.**
Boal Floral Co., 215 E. State St.
- JACKSON, MICH.**
J. B. Blessing, 256 E. Main St.
- JACKSON, MISS.**
Robert E. Langley, New Water Works Road.
- JACKSONVILLE, FLA.**
Mills, The Florist, Inc., 36 W. Forsythe Ave.
- Tomlinson Key Floral Co., 210 Main St.**
- JACKSONVILLE, ILL.**
Joseph Hehl & Sons, 229 W. State St.
- JAMESTOWN, N. Y.**
Lakeview Rose Gardens, 304 Main St.
- JANESVILLE, WIS.**
Janesville Floral Co.
- JERSEY CITY, N. J.**
H. G. Weidemann, 222 Monticello Ave.
- JOHNSTOWN, N. Y.**
Wollager Bros., O'Neil Ave.
- JOHNSTOWN, PA.**
T. Malbranc, 405 Main St.
- JOLIET, ILL.**
Chicago Carnation Co., 407 E. Jefferson St.
Lobo Florist, Hobbs Building.
- KALAMAZOO, MICH.**
Van Bochove & Brother.
- KANE, PA.**
Kane Greenhouses, 46 Birch St.
- KANKAKEE, ILL.**
George Faber, 162 S. Washington St.
- KANSAS CITY, KANS.**
L. C. Fields, 10th and Splitlog Aves.
- KANSAS CITY, MO.**
Alpha Floral Co., 1105 Walnut St.
W. J. Barnes, 38th and Euclid Aves.
Samuel Murray, 1017 Grand Ave.
Arthur Newell, 112 Grand Ave.
Wm. L. Rock Flower Co., 1106 Grand Ave.
- KENDALLVILLE, IND.**
Johnson Floral Co., 324 Silver St.
- KENOSHA, WIS.**
L. Turner & Sons, 325 Park Ave.
- KENTON, OHIO.**
Sabransky's Floral Store, N. Detroit St.
- KEOKUK, IOWA.**
R. G. Schlotter, 708 Main St.
- KEWANEE, ILL.**
C. M. Hamilton, 204 E. Third St.
- KENNEBUNK, MAINE.**
Lafayette Elm Greenhouses.
- KINGSTON, ONT.**
John N. Watts, 179 Wellington St.
- KINGSTON, N. Y.**
Valentin Burgevin's, Inc., Fair and Main Sts.
- KITCHENER, ONT.**
Downing-Steen & Co.
J. S. Orlovski Floral Co., Ltd., 124 King St. W.
- KNOXVILLE, TENN.**
Charles L. Baum, "The Home of Flowers."
Charles W. Crouch, 523 Gay St.
- KOKOMO, IND.**
Coles Flower Shop.
- LACONIA, N. H.**
Laconia Flower Store, Main St.
- LACROSSE, WIS.**
LaCrosse Floral Co.
John A. Salzer Seed Co.
- LAFAYETTE, IND.**
F. Dörner & Sons Co., 668 Main St.
- LaGRANGE, ILL.**
LaGrange Floral & Seed Co., 9 S. 5th Ave.
- LA JUNTA, COLO.**
The Valley Floral & Nursery Co., 215 Colorado Ave.
- LAKE CHARLES, LA.**
Chas. D. Otis, 323 Woodruff.
- LAKE FOREST, ILL.**
Culvert Floral Co.
- LANCASTER, N. Y.**
Palmer's Greenhouses, 24 Palmer Place.
- LANCASTER, OHIO.**
W. E. Gravett, 833 E. Wheeling St.
- LANCASTER, PA.**
The B. F. Barr Co., 116 N. Queen St.
The Rosery, 30 Penn Square.
H. A. Schroyer, 115 N. Duke St.
- LANCASTER, WIS.**
Stratton's Greenhouses.
- LANSING, MICH.**
John A. Bissinger, 624 N. Capitol Ave.
Harry E. Sailer, 111 W. Michigan Ave.
Smith Floral Co., 105 W. Michigan Ave.
- LA PORTE, IND.**
The Kaber Co., 812 Jefferson Ave.
- LA SALLE, ILL.**
Simmen, The Florist, 734 First St.
- LAUREL, MISS.**
Laurel Floral Co., 543 Central Ave.
- LAWRENCE, MASS.**
W. C. Campbell, 17 Lawrence St.
A. Wagland, 647 Broadway.
- LAWTON, OKLA.**
The Hornaday Greenhouses, 11 Maple St.
- LAWRENCE, KANS.**
Sunnyside Floral Co., 5th and Delancey Sts.
- LEBANON, IND.**
Paul O. Tauer.
- LEBANON, PA.**
J. F. Vavrous & Sons, 335 Gullford St.
- LEBANON, TENN.**
Anderson Floral Co.
- LEHIGHTON, PA.**
Paul Niehoff, 328 S. First St.
- LEIPSI, OHIO.**
Leeson's Greenhouse.
- LENOX, MASS.**
Michael O'Brien.
- LEOMINSTER, MASS.**
J. Fuller, Florist, 31 Orchard St.
- LEWISTON, IDAHO.**
L. B. Hill, 812 Main St.
- LEWISTON, MAINE.**
Ernest Saunders, 578 Main St.
- LEWISTON, PA.**
R. G. Bowersox, Electric Ave.
- LEXINGTON, KY.**
Honaker, The Florist, 160 W. Main St.
John A. Keller Co., 123 E. 6th St.
Michler Brothers Co., 415 E. Maxwell St.
- LEXINGTON, VA.**
McCrum's.
- LIMA, OHIO.**
Eggert N. Zetlitz, 207 W. Market St.
- LINCOLN, NEB.**
Chapin Brothers, 127 S. 13th St.
Eiche Floral Co., 1333 O. St.
Frey & Frey, 1338 O. St.
- LISBON, OHIO.**
J. W. Scott, West Lincoln Way.
- LITTLE FALLS, N. Y.**
J. O. Graham, 520 Garden St.
- LITTLE ROCK, ARK.**
Tipton & Hurst, 521 Main St.
- LOCKPORT, N. Y.**
Lewis Flower Shop, 119 Main St.
Thomas Mansfield Est., 475 Hawley St.
- LOGANSPOUT, IND.**
J. A. Newby, 809 W. Broadway.
- LONDON, ONT.**
Dick's Flower Shop, 235 Dundas St.
J. Gammage & Sons, Ltd.
West Floral Co., E. B. Hamilton, Mgr., 249 Dundas St.
- LONG BEACH, CAL.**
Lowe's Flower Shop, 220 W. Ocean Ave.
- LONG BRANCH, N. J.**
W. G. Eisele, 327 Cedar Ave.
- LONGMONT, COLO.**
Robbins' Flower Shop, 421 Coffin St.
- LORAIN, OHIO.**
Carek, Florist, 2041 Broadway.
L. C. Hecock Floral Co., 333 E. Broad St.
- LOS ANGELES, CAL.**
Darling's Shop, 208 W. Sixth St.
D. S. Purdie & Co., 212 W. 4th St.
Redondo Floral Co., 218 W. 7th St.
Wright's Flower Shop, 224 W. 4th St.
- LOUISVILLE, KY.**
August B. Baumer, Masonic Temple.
Jacob Schulz Co., 550 S. 4th Ave.
C. B. Thompson & Co., 532 4th Ave.
F. Walker Co., 312 W. Chestnut St.
Wm. Walker & Co., 615 4th Ave.
- LOVELAND, COLO.**
Robbins & Sons, 863 N. Cleveland Ave.
- LOWELL, MASS.**
James L. Kenney, 185 Central Ave.
Morse & Beals, 8 Merrimack Sq.
- LYNBROOK, L. I., N. Y.**
Weber Flower Shop.
- LYNCHBURG, VA.**
J. J. Fallon, 1009 Main St.
Miss McCarron, 1017 Main St.
- LYNN, MASS.**
Gibbs Brothers, 232 Union St.
Wm. Miller & Sons, 884 Western Ave.
- McKEESPORT, PA.**
J. M. Johnson, 531 Locust St.
- MACON, GA.**
Idle Hour Nurseries, 109 Cotton Ave.
- MADISON, IND.**
L. E. Hitz.
- MADISON, N. J.**
E. Wagner, Keep St.
- MADISON, WIS.**
Bentscher Floral Co., 1301 Williamson St.
- MALDEN, MASS.**
E. D. Knutson & Son, 160 Pleasant St.
J. Walsh & Son, 4 Summer St.
- MANITOWOC, WIS.**
Rudolph Floral Co., North 8th St.
- MALONE, N. Y.**
Miss L. G. Rennie, 51 E. Main St.
- MANCHESTER**
So. Manchester, Conn.
Park Hill Flower Shop, Main St.
- MANCHESTER, MASS.**
Avel Magnuson, 21 Vine St.
- MANCHESTER, N. H.**
F. J. Binby, Trenton St.
- MANKATO, MINN.**
Neil Neilson, cor. Front & Marshall Sts.
The Windmiller Co., 101 Rhine St.
- MANITOWOC, WIS.**
The M. G. Madison Seed Co., 712 Commercial St.
- MANSFIELD, O.**
Mansfield Floral Co., 14 S. Park St.
Stuhldreher Bros., 32 W. 4th St.
- MAQUOKETA, IA.**
H. L. Hill, W. Pleasant St.
- MARQUETTE, MICH.**
E. R. Tauch, 1015 N. 3rd St.
- MARIETTA, O.**
J. W. Dudley Sons Co., 290 Front St.
- MARINETTE, WIS.**
George Vatter, 937 State St.
- MARION, IND.**
Marion Floral Co., 406 S. Adams St.
- MARION, O.**
F. E. Blake, 110 N. Center St.
- MARLBOROUGH, MASS.**
G. C. & B. A. Stevens, 232 Main St.
- MARSHALL, MO.**
Marshall Floral Co.
- MARSHALLTOWN, IA.**
James L. Denmead, 109 E. Main St.
Kembs Flowers, 529 N. 3rd St.
- MARSHFIELD, WIS.**
T. D. Heiko, 603 W. 5th Ave.
- MARTINS FERRY, O.**
Chas. R. O'Beirne, 118 S. 4th St.
- MARTINSBURG, VA.**
The Flower Shop, 124 King St.
- MARTINSVILLE, IND.**
Martinsville Floral Co., 865 E. Harrison St.
- MARYVILLE, MO.**
The Engelmann Greenhouses, 1001 S. Main St.
- MASON CITY, IA.**
Kemble & Goodman, 1207 S. Federal St.
- MANSILON, O.**
Augustus Weaver, 811 E. Main St.
- MAYNARD, MASS.**
Albert Bailey & Son, Acton St.
- MAYSVILLE, KY.**
C. P. Dietrich & Sons, 219 Market St.
- MEADVILLE, PA.**
The Posey Shop of Haas & Son, 292 Chestnut St.
- MECHANICSVILLE, N. Y.**
Collins' Flower Shop, 34 N. Main St.
- MEDIA, PA.**
The Lorgus Co., 36 W. State St.
- MEDINA, N. Y.**
White Bros., 546 Main St.
- MEDINA, O.**
Hammerschmidt & Clark, 117 W. Friendship St.
- MELROSE, MASS.**
The Casey Florist Co., 93 Maple St.
- MEMPHIS, TENN.**
Idlewild Greenhouses, 89 S. Main St.
Johnson's Greenhouses, 153 Madison St.
- MENDOTA, ILL.**
Restland Floral Co.
- MERIDIAN, CONN.**
Joseph A. Greenbacker, Old Colony Rd.
- MERIDIAN, MISS.**
Mrs. J. E. Watts, 715 33rd St.
- MIAMI, FLA.**
The Exotic Gardens, 801 12th St.
Miami Floral Co., Ave. J 13th to 15th Sts.
- MIAMI, OKLA.**
Miami Flower Shop, 59 N. Main St.
- MICHIGAN CITY, IND.**
August C. Reicher, 607 Franklin St.
- MIDDLETOWN, O.**
G. A. Beckman, 136 W. 8th St.
Jos. R. Goldman.
- Middleboro, MASS.**
Selby, The Florist, 328 Main St.
- MIDDLEBORO, MASS.**
The Leland Carnation Co., 28½ Center St.
- MIDDLETOWN, CONN.**
Otto Kaser's Sons, 187 Bridge St.
- MILES CITY, MONT.**
Miles City Greenhouses, 1013 Main St.
- MILFORD, MASS.**
W. D. Howard, 150 S. Main St.
- MILTON, PA.**
Fairview Greenhouses, 224 Turbet Ave.
- MILTON, MASS.**
Geo. M. Anderson & Sons, 505 Center St.
- MILWAUKEE, WIS.**
Baumgarten Florist, Inc., 130 Mason St.
Currie Brothers Co., 381 E. Water St.

Edlefson-Leidiger Co., 419 Milwaukee St.
James M. Fox & Son, 437 Milwaukee St.
Gimbel Brothers, Grand Ave. and W. Water St.
A. Currie & Co., 130 Wisconsin St.
E. Welke Co., 752 Third St.
W. C. Zimmerman, 429 Grand Ave.
MINERAL POINT, WIS.
The Greenhouse, W. Fountain St.
MINNEAPOLIS, MINN.
L. S. Donaldson Co., cor. 6th and Nicolet Aves.
Swanson's, Inc., 912 Nicolet Ave.
MINOT, N. D.
Valker's Greenhouse.
MISHAWAKA, IND.
C. L. Powell, 121 N. Main St.
MITCHELL, S. D.
Davison County Greenhouse, 731 S. Montana St.
MOBILE, ALA.
The Goodrad Floral Co., 982 Dauphin St.
The Minge Floral Co., 9 N. Conception St.
Ravler & Son, 250-260 George St.
MONCTON, NEW BRUNS.
Fraser Floral Co., Ltd., Main St.
MONESSEN, PA.
Irwin's Flower Shop, 413 Donner Ave.
MONONGAHELA, PA.
I. Shelby Crall Co., 251 Main St.
MONROE, MICH.
Otto H. Cron.
MONTCLAIR, N. J.
Charles R. Butcher, 201 Bellevue Ave.
F. W. Massmann, 416 Bloomfield Ave.
MONTGOMERY, ALA.
Rosemont Gardens, 116 Dexter Ave.
MONTICELLO, IA.
C. L. Van Meter.
MONTREAL, QUE.
Dominion Floral Co., 484 St. Catherine St. W.
Hall & Robinson, 825 St. Catherine St. W.
McKenna, Ltd., Cor. St. Catherine and Guy Sts.
MOOREHEAD, MINN.
Briggs Floral Co., Front and Eighth Sts.
MOOSUP, CONN.
J. Fred Baker, Prospect St.
MORGANTOWN, W. VA.
Sturgiss Florist, 422 High St.
MORRISTOWN, N. J.
E. A. Holton, 140 South St.
MORRISTOWN, TENN.
Rhea-Trobaugh Florists, E. 2nd North St.
MOSCOW, IDAHO.
Roselawn Greenhouses, 317 N. Main St.
MT. CARMEL, PA.
K. M. Erdman & Son, 304 S. Vine St.
MT. CLEMENS, MICH.
August Von Boeseler.
MT. PLEASANT, MICH.
Mt. Pleasant Greenhouses.
MT. VERNON, ILL.
Helserman's, 208 S. 9th St.
MT. VERNON, N. Y.
Clark, The Florist, 4th Ave. and 1st St.
Arthur Dummett, 25 S. 4th Ave.
MT. VERNON, OHIO.
Chas. E. Sharp, 203 S. Main St.
MUNCIE, IND.
Eric Buchholz, Main and Walnut Sts.
MURPHYSBORO, ILL.
Wisely, Florist, 16th and Oak Sts.
MUSCATINE, IOWA.
Geo. Kranz & Son, 210 Iowa Ave.
MUSKEGON, MICH.
Butterworth Floral Co., 15 S. Terrace St.
L. Wassermann, W. Western Ave.
MUSKOGEE, OKLA.
Muskogee Carnation Co., 310 W. Broadway.
NANTUCKET, MASS.
Voorneveld, The Florist, Centre and Pearl Sts.
NASHUA, N. H.
Geo. E. Buxton.
NASHVILLE, TENN.
Geny Brothers, 212 5th Ave., N.
Joy Floral Co., 601 Church St.
NAUGATUCK, CONN.
A. N. Squire.
NEVADA, MO.
Kaupp's Greenhouses.
NEW ALBANY, IND.
John G. Bettmann & Son, 1601 E. Main St.
NEW BRIGHTON, PA.
Thompson, Florist, 813 3rd Ave.
NEWARK, OHIO.
Charles A. Duerr, 23 Arcade.
Paul M. Halbrooks, 12 E. Church St.
Kent Brothers, 20 W. Church St.
NEWARK, N. J.
Begerow's, 946 N. Broad St.
Joseph F. McDonough, 376 Bellevue Ave.
Phillips Bros., 938 Broad St.
Washington Florist, 577 Broad St.
NEWARK, N. Y.
Arthur E. Bebb, 7 Grace Ave.
NEW BEDFORD, MASS.
Peter Murray.

NEW BRIGHTON, PA.
Brighton Flower Shop, Masonic Bldg.
NEW BRITAIN, CONN.
F. H. Bollerer's Posy Shop, 7 Main St.
Volz Floral Co., 792 W. Main St.
NEW BRUNSWICK, N. J.
Frank K. Bennett, 72-78 Louis St.
NEWBURGH, N. Y.
Yuess Gardens Co., 91 Water St.
NEWBURYPORT, MASS.
E. W. Parson, 38 State St.
NEW CASTLE, PA.
Butz Bros., N. Mercer St.
Fischer & McGrath, 12 N. Mill St.
NEW HAVEN, CONN.
J. N. Champion & Co., 1026 Chapel St.
The S. H. Moore Co., 1054 Chapel St.
The Myers Flower Shop, 936 Chapel St.
NEW KENSINGTON, PA.
McRae-Jenkins Co., 862 5th Ave.
NEW LONDON, CONN.
Fisher, The Florist, 104 State St.
NEW ORLEANS, LA.
Avenue Floral Co., 3442 St. Charles Ave.
P. A. Chopin, 2800 St. Charles Ave.
Charles Eble, 121 Baronne St.
Metairie Ridge Nursery Co., 135 Carondelet St.
Scheinuk The Florist, 2600 St. Charles Ave.
NEW PHILADELPHIA, OHIO.
Endres Floral Co., 631 High St.
NEWPORT, KY.
Edwards Floral Co., 527 York St.
NEWPORT, R. I.
Thomas J. Gibson, 36 Washington Sq.
Stewart Ritchie, 40 Broadway.
Oscar Schultz, 18 Broadway.
NEWPORT NEWS, VA.
Henry C. Van Sant, 3113 Washington Ave.
NEW ROCHELLE, N. Y.
Bassi Freres, 202 Main St.
Chapman's, 270 Main St.
NEWTON, MASS.
Newton Rose Conservatories, 329 Newtonville Ave.
NEW YORK, N. Y.
Astoria Florist, 2188 Broadway.
Boulevard Floral Co., 2391 Broadway.
Charles H. Brown, 2366 Broadway.
Alfred T. Bunyard, 413 Madison Ave.
Frank E. Campbell, 1906 Broadway.
A. B. Cazan, 2751 Broadway.
Charles A. Dards, 44th and Madison Ave.
Equitable Florist Shop, Equitable Bldg., 120 Broadway.
Thos. F. Galvin, Inc., 561 Fifth Ave.
Guido Inc., 595 Lexington Ave.
Fred R. Heaton, Hotel Biltmore.
E. J. Hession, 984 Madison Ave.
William Kather, 754 Madison Ave.
J. P. Klausner, 275 Columbus Ave.
J. G. Leikens, Inc., Madison Ave., at 55th St.
Peter F. McKenney, 503 5th Ave.
Malandre Brothers, 2077 Broadway.
Myer, The Florist, 611 Madison Ave.
J. G. Papadem & Co., 2953 Broadway.
Max Schling, 785 5th Ave.
J. H. Small & Sons, 505 Madison Ave.
Geo. E. M. Stumpp, 761 5th Ave.
Alex. Warendorff, 1193 Broadway.
Young & Nugent, 42 West 28th St.
NIAGARA FALLS, N. Y.
Bischoff, The Florist, 753 Seventh St.
Harris & Lever, 1218 Portage Road.
NILES, OHIO.
C. L. Adgate & Sons, 12 Park Ave.
NOBLESVILLE, IND.
Guy C. Sharp, 280 E. Logan St.
NORFOLK, VA.
Blick's, Inc., 408 Granby St.
George C., 319 Granby St.
Grandy, The Florist, 269 Granby St.
Wm. J. Newton, 303 Granby St.
NORRISTOWN, PA.
Wm. Yeager Co., 78 E. Main St.
NORTH ADAMS, MASS.
Boothman's Flower Shop, 62 Main St.
NORTH BAY, ONT.
A. Jackman, 48 Oak St.
NORTHAMPTON, MASS.
Butler & Ullman.
NORTH EAST, PA.
F. E. Selkregg, 49 S. Pearl St.
NORTH TONAWANDA, N. Y.
Arthur L. Jones, cor. Goudry and Division Sts.
NORWALK, OHIO.
Charles E. Barton, 12 Whittlesley Ave.
NORWICH, CONN.
Geduldig's Greenhouse, 77 Cedar St.
NORWICH, N. Y.
E. F. Quinn, 99 E. Main St.
NYACK-ON-HUDSON, N. Y.
Robert Chester Pye.

OAKLAND, CAL.
J. Seublerger & Co., 418 14th St.
OAKLAND, MD.
The H. Weber & Sons Co.
OAK PARK, ILL.
Albert Schneider, 1048 Lake St.

OBERLIN, OHIO.
Harry A. Cook, 63 S. Main St.
Humm & Jones, 174 E. Lorain St.
OCONTO, WIS.
J. Sylvester, Cook Ave.
OGDENSBURG, N. Y.
John Lawrence, 53 Ford St.
OIL CITY, PA.
W. M. Deyoe & Co., 6 Seneca Ave.
OKLAHOMA CITY, OKLA.
The Foster Floral Co., 120 W. Main St.
Furrow & Co., 208 E. Oklahoma St.
The Stiles Co., 302 W. Main St.
OKMULGEE, OKLA.
George W. Marshall, 112 S. Morton Ave.
OLEAN, N. Y.
Dana H. Herron, 113 N. Union St.
Oppenheim, The Florist, Olean House Block.
OMAHA, NEB.
John H. Bath, 1804 Farnum St.
Lewis Henderson, 1519 Farnum St.
Hess & Swoboda.
Louis M. Rogers, 319 South 16th St.
ONEONTA, N. Y.
Derrick Florist, Theater Building.
OPELIKA, ALA.
The Opelika Floral Co.
OSHKOSH, WIS.
Ward B. Davis, 26 Washington St.
The Miles Co., 26 Frankford St.
OSKALOOSA, IOWA.
Kemble Floral Co.
OSWEGO, N. Y.
Floral Art Studio, 126 W. 2nd St.
W. H. Workman, 61 W. Bridge St.
OTTAWA, ILL.
Wm. S. Lohr, 1600 Ottawa Ave.
OTTAWA, ONT.
R. H. Wright, 54 S. Park St.
OTTUMWA, IOWA.
Kemble Floral Co., 112 North Court St.
C. C. Kranz, 106 N. Market St.
OWATONNA, MINN.
Clinton Falls Nursery Co.
OWENSBORO, KY.
Nanz Floral Co., 100 E. 2nd St.
Tapscott Florist, 12th and Davies Sts.
OWOSSO, MICH.
Owosso Floral Co., 201 W. Main St.
OXFORD, MICH.
R. W. Unger.
PADUCAH, KY.
Schmans Brothers, 504 Broadway.
PAINESVILLE, OHIO.
Wilson Flower Shop, 124 N. St. Clair St.
PALM BEACH, FLORIDA.
Foster & Foster, Hotel Royal Poinciana.
PANA, ILL.
Pana Greenhouses, cor. 3rd and Chestnut Sts.
PARIS, ILL.
John A. Helfrich.
PARIS, KY.
The John Christman Co., 19th St.
PARKERSBURG, W. VA.
J. W. Dudley & Sons, 5th and Juliana St.
PASADENA, CAL.
Eldred Flower Shop, 260 E. Colorado St.
Henry A. Siebrecht, Jr., 381 E. Colorado St.
The Orchid, 342 E. Colorado St.
PASSAIC, N. J.
Edward Seery, Main & Bloomfield Aves.
PASS CHRISTIAN, MISS.
J. B. Adams & Sons.
PATERSON, N. J.
Edward Seery, 85 Broadway.
Wm. Thurston, 88 Van Houten Ave.
PAWTUCKET, R. I.
Frederick C. Hoffman, 306 Main St.
PENSACOLA, FLA.
L. L. Boysen, 252 E. Chase St.
North Hill Greenery, 919 N. Baylen St.
PEORIA, ILL.
Cole Bros., 431 Main St.
Charles Loveridge, 423 Main St.
Siebenthal & Nelson, 409 Main St.
PERU, IND.
Wm. G. Miller, 366 W. 3rd St.
PETERBOROUGH, ONT.
Peterborough Floral Co., 347 George St.
PETERSBURG, ILL.
Thomas Salvason.
PETERSBURG, VA.
Mrs. Robt. B. Stiles.
PETOSKEY, MICH.
Frank Winans, 715 Pleasant St.
PHILADELPHIA, PA.
Charles Henry Fox, 221 S. Broad St.
Fox Flower Shop, 1307 N. Broad St.
E. W. Gaehring, 3054 Frankford Ave.
John C. Gracey, 2034 Columbia Ave.
Charles H. Grakelow, 2453 N. Broad St.
J. J. Habermehl's Sons, Bellevue-Stratford Hotel.
Rupert Kienle, 30 S. 7th St.
Gustave Koethe, Martin Street Greenhouses, Roxborough.
The Chas. F. Krueger Co., Frank Alter, Reading Terminal.
J. Wolff Moore, 1639 N. Broad St.
August Muller, 718 Walnut St.

- Pennoek Brothers, 1514 Chestnut St.
Frank M. Ross, 136 S. 52nd St.
- PHOEBUS, VA.**
R. Hayden Smith, 207 Mellen St.
- PHOENIX, ARIZ.**
Ariz. Seed & Floral Co., 28 S. Central Ave.
Donofrio Floral Department, cor. Cretus and Washington.
- PHOENIXVILLE, PA.**
Pennyucker & Son, 221 Bridge St.
- PINE BLUFF, ARK.**
Davis Floral Co.
- PIQUA, OHIO.**
Gerlach, The Florist, 1521 Washington Ave.
H. P. Smith, 1018 Broadway.
- PITTSBURG, KANSAS.**
The Steinheiser Florist & Nursery Co.
- PITTSBURGH, PA.**
E. C. Ludwig Floral Co., 710 E. Diamond St.
Ludwig Floral Co., 502 Federal St.
Randolph & McClements, 5936 Penn Ave.
A. W. Smith Flower Stores Co., Keenan Bldg.
Mrs. E. A. Williams, 621 Penn Ave.
- PITTSFIELD, MASS.**
F. I. Drake & Co., 175 North St.
The Flower Shop, 40 Fenn St.
- PITTSSTON, PA.**
B. B. Carpenter, Susquehanna Ave.
The William St. Florist, 8 William St.
- PLAINFIELD, N. J.**
Chas. L. Stanley, 159 E. Front St.
- PLATTEVILLE, WIS.**
The Platteville Floral Co.
- PLYMOUTH, MASS.**
Stevens the Florist, 9 Court St.
- PLEASANTVILLE, N. J.**
Walter R. Thoms, 11 E. Verona Ave.
- POCATELLO, IDAHO.**
W. A. Worel & Son, 636 N. Grant Ave.
- PONTIAC, ILL.**
W. J. Miller & Son, 412 Payson St.
- PONTIAC, MICH.**
Pontiac Floral Co., 559 Orchard Lake Ave.
- PORT CHESTER, N. Y.**
Burgevin Greenhouses, N. Regent St.
Lundell & Schwartz.
- PORT HURON, MICH.**
Matthias Ullenbruch, 1029 Military St.
- PORTLAND, IND.**
W. Frank & Son.
- PORTLAND, ME.**
J. W. Minott Co., 615 Congress St.
Philip H. Talbot, 673 Congress St.
Vose-Smith Co., 646 Congress St.
- PORTLAND, ORE.**
Martin & Forbes Co., 354 Washington St.
Tonseth Floral Co., 287 Washington St.
- PORTSMOUTH, N. H.**
Portsmouth Flower Shop, Market St.
- PORTSMOUTH, OHIO.**
The Herms Floral Co., 817 6th St.
- PORTSMOUTH, VA.**
The W. P. Cotton Floral Co., 333 High St.
- POTTSTOWN, PA.**
Edwin Wickersham, 638 King St.
- POTTSVILLE, PA.**
Guy W. Payne, 21st and Market Sts.
- POUGHKEEPSIE, N. Y.**
Saltford Flower Shop, 286 Main St.
The Arcade Florists, cor. Main and N. Market Sts.
- PRAIRIE DU CHIEN, WIS.**
Dial Garden Greenhouse.
- PRINCETON, ILL.**
W. E. Trimble Greenhouses, 501 Peru St.
- PRINCETON, IND.**
Princeton Gardens.
- PRINCETON, N. J.**
John Heerenmans, 48 Spruce St.
- PROVIDENCE, R. I.**
Wm. A. Bowers, 134 Washington St.
T. J. Johnston & Co., 107 Washington St.
Johnston Brothers, 38 Dorrance St.
- PROVINCETOWN, MASS.**
W. C. Newton, 212 Commercial St.
- PUEBLO, COLO.**
G. Fleischer, 216 N. Main St.
- PUNXSUTAWNEY, PA.**
Crissman Greenhouses Co., Findlay St.
- QUEBEC, CANADA.**
McKenna, Ltd., 9 St. John St.
- QUINCY, ILL.**
Gentemenn Brothers.
F. W. Heckenkamp, Jr., 650 Adams St.
- QUINCY, MASS.**
Johnston's City Flower Store, 1361 Hancock St.
- RACINE, WIS.**
The Flower Shop, 617 Main St.
- RAHWAY, N. J.**
John R. Baumann, 633 St. Georges Ave.
- RALEIGH, N. C.**
J. L. O'Quinn & Co., cor. Polk and Swalm Sts.
- RATON, N. MEXICO.**
Raton Greenhouses, 1100 N. Second St.
- READING, PA.**
J. C. Bauder, 10th and Windsor Sts.
Paul Blackman, Jr., 116 N. 9th St.
- J. H. Giles, 123 S. 5th St.**
Harry C. Huesman, Schuykill and Greenwich Sts.
B. & L. Steckler, 1018 Center Ave.
- RED BANK, N. J.**
Hayes Brothers, 20 W. Front St.
W. W. Kennedy & Sons, 41 Broad St.
- REDLANDS, CAL.**
City Nurseries of Redlands, Inc., 109 A Orange St.
- RED WING, MINN.**
John E. Sten, 584 E. Seventh St.
- RHINEBECK, N. Y.**
Elmer Coon, 17 Chestnut St.
- RICHMOND, IND.**
G. R. Gause, National Road, West.
Fred H. Lemon & Co., 1015 Main St.
- RICHMOND, VA.**
Hammond Co., Inc., 109 E. Broad St.
Mann & Brown, 5 W. Broad St.
Mosmiller Florist, 115 E. Main St.
Ratcliffe & Tanner, 207 N. 6th St.
- ROANOKE, VA.**
Fallon Florist, 210 Jefferson St.
Wertz Florist, Inc., 10 Kirk Ave., S. W.
- ROCHESTER, MINN.**
Broadway Flower Shop, 112 S. Broadway.
Parkin & McQuillan, 114 S. Main St.
Queen City Greenhouse, 111 W. Zombro St.
Rochester Floral Co., 119 S. Main St.
- ROCHESTER, N. Y.**
Geo. T. Boucher, 345 E. Main St.
J. B. Keller-Sons, 25 N. Clinton Ave.
H. E. Wilson, 88 Main St.
- ROCHESTER, N. H.**
Corson's Flower Shop.
- ROCHESTER, PA.**
Thompson, Florist, 238 Jackson St.
- ROCKFORD, ILL.**
H. W. Buckbee.
Swan Peterson & Son, State & Longwood Sts.
- ROCKLAND, MAINE.**
Mrs. A. C. Mather, cor. Pleasant and Purchase Sts.
- ROCK ISLAND, ILL.**
The Flower Shop, 1616 2nd Ave.
- ROCKVILLE CENTER, N. Y.**
Clarence R. Ankers.
- ROCKYFORD, COLO.**
C. M. Ustick.
- ROCKY MOUNT, N. C.**
Rocky Mount Floral Co., 428 E. Thomas St.
- ROME, N. Y.**
Ivar Ringdahl, 406 Elm St.
- ROUNDUP, MONT.**
The Flower Store, 32 Main St.
- RUGBY, N. D.**
Rugby Greenhouse Co.
- RUSHVILLE, IND.**
Glenn E. Moore, 359 E. 6th St.
- RUTHERFORD, N. J.**
W. Rummier, 49 Park Ave.
- RYE, N. Y.**
Moraio Brothers, 64 Purchase St.
- ST. CHARLES, MO.**
Edwin Denker, 217 S. 4th St.
- ST. CATHERINES, Ont.**
Robert L. Dunn, 104 Queenston St.
- ST. CLAIR, MICH.**
Charles W. Ruff.
- ST. JOSEPH, MICH.**
A. N. Richardson, Union Bank Bldg.
- ST. JOSEPH, MO.**
Park Floral Co., 510 Francis St.
Stuppy Floral Co., 7th and Francis Sts.
- ST. LOUIS, MO.**
Bergstermann Floral Co., 3117 S. Grand Ave.
Grimm & Gorley, 7th and Washington St.
Koenig Floral Co., 4654 W. Florissant Ave.
F. A. Meinhardt, 4942 Florissant Ave.
Mullanphy Florists, 8th and Locust Sts.
Scruggs-Vandervoort & Barney Co.
Fred C. Weber, 4326 Olive St.
Fred H. Weber, Taylor and Olive Sts.
Windler's Flowers, 2300 S. Grand Ave.
Joseph Witek, 4744-48 Mcpherson St.
- ST. PAUL, MINN.**
Holm & Olson, 24 West 5th St.
- ST. THOMAS, ONT.**
Ralph Crocker, 41 St. Anne's Place.
- SACRAMENTO, CAL.**
W. J. Meldrum, 1015 K St.
- SAGINAW, MICH.**
Chas. Frueh & Sons, 514 Genesee St.
J. B. Goetz Sons, 124-126 S. Michigan Ave.
Grohman, The Florist, 117 N. Franklin St.
Wm. Roethke Floral Co., 200 S. Mich. Ave., W. S.; 335 S. Washington Ave.
- SALAMANCA, N. Y.**
M. M. Dye, 74 Main St.
- SALEM, OHIO.**
V. A. Cowgill, 305 Garfield, Ave.
- SALEM, MASS.**
A. A. Pembroke, 90 North St.
- SALEM, ORE.**
C. B. Clancey, 123 N. Liberty St.
- SALINA, KANS.**
Leighton Floral Co., 407 E. Iron Ave.
- SALISBURY, N. C.**
Salisbury Greenhouses.
- SALT LAKE CITY, UTAH.**
Bailey & Sons Co., 61 East 2nd St., S.
Huddart Floral Co., 62 S. Main St.
Miller Floral Co., 10 E. Broadway.
- SAN ANGELO, TEXAS.**
Nussbaumer Floral Co.
- SAN ANTONIO, TEXAS.**
Edward Green, Avenue C and 8th St.
Hauser Floral Co., 109 Avenue D.
Frank C. Suchy, 412 E. Ramona St.
- SAN DIEGO, CAL.**
Boyle & Darnaud, 412 East C St.
The Flower Shop, 1115 4th St.
- SANDUSKY, OHIO.**
Matern Flower Shop, 915 W. Washington St.
Wagner Greenhouses, 632 Columbus Ave.
- SANFORD, MAINE.**
Huff, Florist, Inc., 2 Shaw St.
- SAN FRANCISCO, CAL.**
Art Floral Co., 255 Powell St.
Mrs. R. E. Darbee, 1036 Hyde St.
Julius Eppstein, Hotel St. Francis.
B. M. Joseph, 233 Grant Ave.
MacRorie and McLaren, 141 Powell St.
Pelicano-Rossi Co., 123 Kearney St.
- SANTA BARBARA, CAL.**
Gleaves Flower Shop, 910 State St.
- SANTA FE, N. M.**
The Clarendon Garden, R. V. Boyle, Prop., De Vargas St.
- SARANAC LAKE, N. Y.**
Adirondack Greenhouses, 186 Broadway.
- SARATOGA SPRINGS, N. Y.**
John Ralph's Greenhouse.
Henry Schrade, 439 Broadway.
- SARNIA, ONT.**
Miss Barron, 177 Front St.
- SASKATOON, SASK.**
J. Macklin & Son, Forsyth St.
- SASKATOON, SASK.**
The Victoria Nursery, cor. 21st and 2nd Aves.
- SAULT STE. MARIE, ONT.**
Victor Mann, 119 Huron St.
- SAVANNAH, GA.**
A. C. Oelschig & Sons.
- SAYRE, PA.**
J. B. Knapp, 108 Packer Ave.
- SCHENECTADY, N. Y.**
Hatcher Florist, N. Y. C. Arcade.
Rosendale Flower Shop, 126 Jay St.
- SCOTTSDALE, ARIZ.**
The Flower Shop, 217 Main St.
- SCRANTON, PA.**
Baldwin, The Florist, 118 Adams St.
Miss Besancon, Adams and Spruce.
M. R. Muir, 430 Spruce St.
New York Floral Co., 401 Spruce St.
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 Miller & Son, 324 Lauder Ave.
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 Simmons & Son, 348 Yonge St.
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The December meeting resulted in the following nominations for the Officers to serve this club the next year beginning on Jan. 1st:

President, Mr. M. J. Brinton, of Christiana, Pa.; vice-president, Mr. B. F. Barr; secretary, Albert M. Herr; treasurer, Mr. Harry K. Rohrer.

The programme committee reported an illustrated lecture on Holland by Mr. P. W. DeHertogh for the January meeting.

The social committee, Mr. H. K. Rohrer, L. Landis & A. F. Strickler, reported that they were ready with their programme and the meeting adjourned to partake first of the refreshments prepared and then to bowl, play cards, billiards and pool.

Mr. Hoehl of the S. S. Skidelsky Co. was duly initiated as a bowler and after trying both sides of the alley without getting any pins he decided that the middle was the place to roll and ran up a very creditable score.

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FOREIGN F. T. D. MEMBERSHIP

It is of inestimable value to the Association that the foreign field should be given more attention and our membership largely increased. At present we have representatives in England, Scotland, Wales and Cuba. Within the past month we have added Cairo, Egypt and Buenos Ayres, Argentine Republic. Why are we not represented in France, Italy, Switzerland, Japan, Norway and many other countries where Americans are sure to travel within a short time! It is obvious that it is necessary for every F. T. D. member who places an order abroad to strongly urge the necessity of foreign representatives, so that we may place orders with confidence and assurance they will be properly executed.

The F. T. D. office is frequently called on to furnish information relative to the placing of orders in other countries. Recently we have had such inquiries for France, Italy, Switzerland, Germany, Norway and China. We have furnished the reference desired in each case, but how much better it would be if we had a member in each country who could be relied on to take care of our needs.

The Secretary's office has not been negligent in this important mission, as we are constantly on the alert and at every opportunity, take advantage of any lead that will assist us in this work. It is, therefore, obligatory upon every member of the Association to furnish this office with any information that will help us in this great work of building up our foreign membership. Last April the Secretary drew up a circular letter, asking and urging florists in foreign countries to become members of our Association or if they did not desire membership, to become correspondents so that we might place orders with them in the confidence that they would be properly executed. At that time we mailed about 500 letters to all parts of the world, with the exception of Russia,

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Austria-Hungary and Germany. Just as soon as conditions will warrant, we will complete our program of F. T. D. propaganda and we hope to have a better response to our efforts than we have had in the past. The response to our appeal of last April has not been up to expectations; however, we gained two new members and received several letters, stating that the writer would act as correspondent, which we have already found to be of material assistance to our members. We hope to make a second appeal sometime in the near future and we shall make

every effort to present our claims in their own language which we did not do in our initial attempt and we are hopeful that results will prove more satisfactory.

I cannot understand why France, Italy, Switzerland, Spain, Australia and the Hawaiian Islands do not realize the importance of their membership in the F. T. D. or at least giving us the privilege of showing them their lost opportunity. Their absolute indifference, not being courteous to make a reply to our correspondence, is beyond my comprehension. However, it is quite possible they don't understand our intentions and take it for granted that it is another American trick to fleece them in some way. Some line of educational propaganda will be necessary to enlighten them on the necessity of international co-operation. The Secretary is fully awake on the subject and will lose no opportunity to spread the gospel of F. T. D.

Yours for more F. T. D. A. co-operation,

ALBERT POCHELON,
Secy. F. T. D. A.

A BIG GREENHOUSE PROJECT.

According to a newspaper article an effort is being made to finance a big greenhouse company to be organized at Webster, Mass. The project is being presented by Ferdinand C. Reibe, who is trying to interest Webster people in the plan for the erection of seven mammoth greenhouses, to be 400 feet long and from 40 to 60 feet in width, where he proposes to grow flowers for the market, selling direct to the large dealers. Mr. Reibe has had blueprints made and plans drawn for the proposed venture, together with an estimate of the cost, which he places at over \$200,000. Mr. Reibe has long been owner and manager of the Webster Floral Co.

ARNOLD ARBORETUM JOURNAL.

The second copy of the Journal of the Arnold Arboretum, edited by Prof. Charles S. Sargent, has been issued, and will prove of no little value to students of advanced botany and others who desire specific information about the subjects discussed. A particularly interesting article is one written by E. H. Wilson on the Bonin Islands and their ligneous vegetation. A supplementary article deals with new woody plants in the Bonin Islands. Other articles are: "Notes on American Willows," by Camillo Schneider; "New Species, Varieties and Combinations from the Herbarium and the Collections of the Arnold Arboretum," by Alfred Rehder.

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WALTHAM, MASS.

GENERAL NEWS NOTES.

The officers of the New York Florists' Club elected at the last meeting are as follows: President, Archibald M. Henshaw; vice-president, C. W. Knight; secretary, John Young; treasurer, William C. Rickards, Jr.; trustees for two years, Arthur Herrington, Emil Schloss, Max Schling.

Officers of the Albany Florists' Club to serve for the next year are as follows: President, Edward P. Tracey; vice-president, Albert Jenkins; secretary-treasurer, Louis H. Schaefer; trustees for two years, Fred A. Danker, Frederick Henkes, and Thomas F. Tracey.

Prof. E. H. Wilson, assistant director of the Arnold Arboretum, lectured on Korea and Its Vegetation before the Horticultural Society of New York at its meeting Wednesday evening.

Wilbur Patten, of Tewksbury, Mass., has gone to Florida where he owns an orange grove. Probably he will spend the winter there.

J. W. M. Huckleby has bought the

greenhouse establishment of John G. Bettmann & Sons at New Albany, Ind.

The greenhouse business of Carl Swenson at Winstead, Ct., has passed into the hands of Henry T. Hctor.

A large addition has been made to the greenhouses of France & Vandergrift at Monroe, Mich.

Luhman Bros. have opened a new greenhouse establishment at Muskegon, Mich. Edward Luhman will be in active charge.

About ten thousand feet of glass has been added to the Anderson greenhouse establishment at Cannon Falls, Minn. Clyde M. Young, who was formerly at Oelwain, Ia., is in charge.

The new offices of the Chicago Florists' Club are: President, T. E. Waters; vice-president, A. T. Pyfer; secretary, Fred Lautenschlager; treasurer, Paul Weiss; trustee for three years, W. J. Keimel.

Frank M. Ross has been rebuilding his store in Philadelphia and the changes made are great improvements.

RAMBLING OBSERVATIONS OF A ROVING GARDENER

It is evident that very free use is to be made this holiday season of greens from the woods as well as the various colored fruits borne by native shrubs and trees. A great amount of this material is being displayed by the florists, but it often happens that the gardener can obtain all that is needed for house decoration by making a little trip into the country. Judging from appearances the fall fruiting shrubs and other plants have seldom borne so abundantly as this season. The only exception seems to be in the case of the partridge berry, which is reported not so abundant as in some recent years.

The supply of decorative material is

much larger than is commonly realized. Naturally the holly is foremost in popularity and the crop of berries this year seems to be a generous one, wherever the holly grows. While the American holly is somewhat inferior to its English cousin in the luster of its leaves, it is nevertheless a very decorative plant. Sometimes the fact is overlooked that there are both male and female trees. Some trees ~~never~~ bear fruit and others remain barren unless located in a group where the blossoms can be fertilized. As naturally found the holly grows in groups and even a few trees will supply all the decorative material needed for many years, if care is taken in remov-

ing the branches. All too often they are ruthlessly broken down, the fact being overlooked that the holly is a very slow growing tree.

Seldom has so large a supply of the red berries, or alder berries, *Ilex verticillata*, been seen in the stores as this season. The berries will not last much longer, and do not keep very long in the house, but for a brief time they make a fine display. Many people this year are using them in their window boxes in connection with evergreens, thus giving the house a cheerful note of color.

Another excellent berry to use in this way, and one which is also highly decorative when properly displayed in a vase or bowl indoors is *Myrica cerifera*, the bayberry, wax berry or candle berry, to use the various names given it. It is a plant which grows mostly along the coast and as its name implies has long been used for making candles. In the South it is



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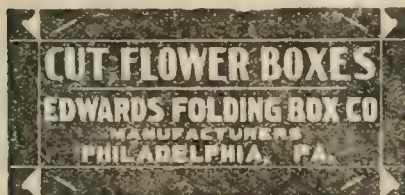
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called the wax myrtle, and is a fine plant for decorative purposes, because of the persistent character of its leaves. In the North it drops its foliage fairly early, but the berries stay on all winter. I like to use these berries in window boxes, because of the attraction which they have for the birds. Chickadees in particular will often drop down upon the boxes and peck away at the little gray berries which they seem to consider a delectable dainty.

A vine that offers many possibilities for house decoration at this season is the common Bittersweet, *Celastrus scandens*. The fruit has been borne in great profusion this fall and where the vines grow over trees or walls the berries produce a handsome effect. They lend themselves also to artistic arrangements indoors. The evergreen Bittersweet is not so useful for indoor work even when fruiting well. Yet there are many opportunities for displaying the pleasing green leaves to advantage.

The Lycopodiums, including the so-called running pine and the standing pine, will be depended upon of course, to a large extent in making wreaths.

Of course, mountain laurel must not be overlooked. A very large amount is being used this season, although the Society for the Preservation of Native Plants sent out a bulletin urging that great care be exercised in gathering laurel. No doubt, irreparable damage is done each season by laurel gatherers who are concerned only with immediate results and neither look into the future nor care about the loss which the public will suffer, because of their carelessness. It is true that there are many sections where an enormous number of plants may be found. The writer knows of one section in Eastern Massachusetts where acres are covered with laurel. Yet in time it will become extinct unless some curb is put upon the laurel harvesters. There is no reason why there shouldn't be an abundance of laurel for decorative purposes for all time. There seems to be no good reason why the laurel should not be propagated and planted much more freely than in the past.

A shrub much used for Yuletide decorations is *Leucothoe catesbaei*, the leaves of which lose their summer green, and becomes bronze with the approach of winter. *L. axillaris* is another *Leucothoe* much used by florists having smaller leaves than the first.

From the South comes *magnolia grandiflora*, which has grown in

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popularity in late years. The large green leaves keep their form and color well even when dry and are very attractive for backgrounds. A great amount of this magnolia is now being used yearly.

Another comparatively new material is called Mexican ivy, although there seems to be no excuse or reason for the name, as it is not an ivy at all and apparently does not even grow in Mexico. The botanical name, I believe, is *Vancouveria hexandra*. Its native habitat is a section beginning in Northern California and running up to British Columbia. It has long, delicate shoots and leaves wide at the base and pointed at the top.

People living in the Central and Southern States can also make use of Box. Occasionally plants are able to withstand the severe winters of New England, but it seems almost like a sacrilege to rob them of their leaves. Farther South where the Box grows into great trees it can be preyed upon with less regret, and a large business has been built up in the commercial handling of Box which the florists find exceedingly useful.

There is some difference of opinion as to the value of *Buddleia asiatica* as a florists' flower. It is used to a considerable extent in and around New York City, but not much of it is to be found in commercial establishments in the vicinity of Boston. Without considering the pros and cons of its commercial success there is no doubt about the value of *Buddleia asiatica* on the private place. It is a flower which gardeners can exhibit with pride and whenever shown invariably excites admiration. It can readily be had in bloom for Christmas if started reasonably early, say about the first of August. More often, perhaps, it is timed to bloom in January or February. Usually gardeners can buy plants in 5-inch pots at this season which after one shift they will come into bloom by the end of January. It likes a temperature of about 50 and can be carried along in any house where carnations are being grown. In order to grow one's own plants for flowers a year from now cuttings should be made in January or February. Of course the fact should not be overlooked that this *Buddleia* requires a reasonably large amount of space.

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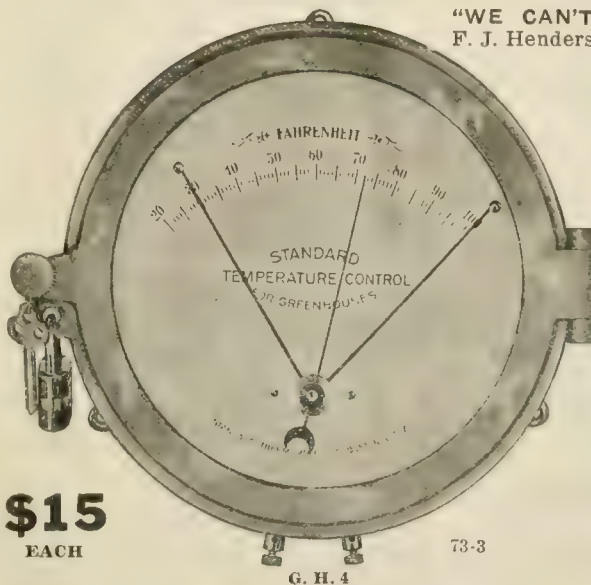
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THE MARKET.

There has been plenty of stock at the prices asked, but the prices have been higher than ever before known at this season of the year. At the prices of former years probably stock would be short. This season the high prices have restricted the buying, but as everything offered could be disposed of, no one had cause to grumble. Roses are not plentiful but some good flowers have been shown the past week. Hadleys and Russells which have come into the Boston market from the Waban Rose Co. have been remarkable for their size and general quality. Sweet peas are short so far, and seldom at this season are so few snapdragons to be seen in the market. The crop seems to be badly off this year, as the quality of what little stock shown up is not very good. Carnations keep up to 10 and 12 cents. At those prices there are enough to go around. Greens have sold well, but are none too plentiful. Some excellent double stevia is arriving regularly now and is going well.

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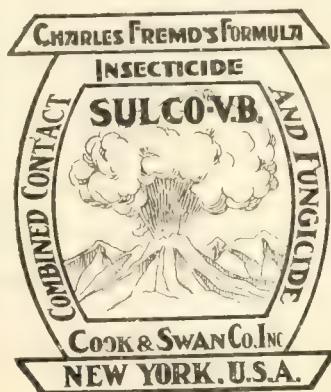
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Roses							
Am. Beauty	12.00 to 75.00	40.00 to 100.00	30.00 to 75.00	35.00 to 100.00	25.00 to 150.00	25.00 to 75.00	5.00 to 75.00
Hadley	12.00 to 40.00	6.00 to 40.00	40.00 to 50.00	12.00 to 75.00	4.00 to 15.00	..... to	8.00 to 15.00
Hoosier Beauty	12.00 to 40.00	5.00 to 20.00	15.00 to 20.00	12.00 to 50.00	10.00 to 65.00	..... to	6.00 to 20.00
Killarney	10.00 to 40.00	5.00 to 15.00	6.00 to 15.00	10.00 to 35.00	6.00 to 35.00	6.00 to 15.00	6.00 to 15.00
White Killarney	12.00 to 35.00	6.00 to 15.00	6.00 to 12.00	10.00 to 35.00	6.00 to 35.00	6.00 to 15.00	6.00 to 15.00
Mrs. Aaron Ward	12.00 to 35.00	6.00 to 15.00	6.00 to 12.00	10.00 to 35.00	6.00 to 35.00	6.00 to 15.00	6.00 to 15.00
Mrs. Chas. Russell	12.00 to 50.00	5.00 to 40.00	20.00 to 35.00	12.00 to 75.00	12.00 to 100.00	8.00 to 35.00	8.00 to 15.00
Mr. Geo. Sawyer	12.00 to 40.00	5.00 to 15.00	..... to	10.00 to 75.00	6.00 to 35.00	8.00 to 25.00	8.00 to 15.00
Columbia	10.00 to 30.00	6.00 to 30.00	20.00 to 30.00	12.00 to 75.00	8.00 to 75.00	8.00 to 25.00	10.00 to 25.00
Maryland	10.00 to 20.00	5.00 to 12.00	8.00 to 15.00	12.00 to 50.00	6.00 to 35.00	6.00 to 15.00	6.00 to 15.00
Ophelia	12.00 to 35.00	6.00 to 20.00	8.00 to 20.00	10.00 to 60.00	6.00 to 35.00	6.00 to 15.00	6.00 to 20.00
Adiantum	.75 to 1.00	1.00 to 2.00	..... to 1.50	1.00 to 1.50	..... to .....	..... to 2.00	2.00 to 3.00
Asparagus plum (100 bchs) apren	.25 to .50	20.00 to 31.00	50.00 to 75.00	25.00 to 50.00	50.00 to 75.00	..... to 50.00	35.00 to 50.00
Pom Pons	.50 to 1.00	..... to	40.00 to 60.00	25.00 to 50.00	..... to .....	..... to	50 to 1.00
Bonaffon	1.00 to 5.00	..... to .....	..... to	8.00 to 10.00	..... to .....	..... to .....	..... to
Calendulas	1.50 to 5.00	2.00 to 5.00	5.00 to 6.00	4.00 to 6.00	4.00 to 6.00	..... to .75	3.00 to 4.00
Carnations	6.00 to 8.00	6.00 to 12.00	8.00 to 10.00	10.00 to 15.00	8.00 to 25.00	8.00 to 10.00	4.00 to 8.00
Chrysanthemums	.50 to 6.00	.25 to 75.00	15.00 to 50.00	25.00 to 5.00	22.00 to 25.00	3.00 to 4.00	8.00 to 40.00
Calla	2.00 to 4.00	2.00 to 4.00	..... to	2.00 to 2.50	.20 to .25	..... to 3.00	35.00 to 35.00
Ferns, Hardy	1.50 to 2.00	..... to 25.00	..... to .....	..... to	3.00 to 4.00	..... to 2.50	..... to 2.50
Galax leaves	..... to 2.00	..... to 1.25	..... to .....	..... to 20.00	1.50 to 2.00	..... to 2.00	..... to 1.00
Marguerite	.75 to 3.00	1.00 to 2.00	2.00 to 3.00	2.00 to 4.00	125.00 to 150.00	..... to 1.50	1.50 to 2.50
Narcissus	..... to 4.00	4.00 to 5.00	..... to 6.00	6.00 to 8.00	..... to	5.00 to 6.00	6.00 to 8.00
Orchids Cattleyas	75.00 to 150.00	50.00 to 200.00	100.00 to 200.00	..... to 200.00	2.00 to 3.00	125.00 to 150.00	100.00 to 125.00
Orchids Cypripediums	..... to .75	3.00 to 4.00	25.00 to 50.00	15.00 to 20.00	20.00 to 25.00	..... to .....	..... to
Sweet Peas	2.00 to 4.00	3.00 to 4.00	2.00 to 4.00	3.00 to 5.00	2.00 to 4.00	..... to	2.00 to 3.00
Snap Dragon	.50 to 2.00	2.00 to 6.00	10.00 to 20.00	15.00 to 25.00	12.00 to 15.00	8.00 to 12.00	6.00 to 8.00
Violets	2.00 to 3.00	2.00 to 3.00	2.00 to 3.00	2.00 to 4.00	3.00 to 4.00 to 2.50 to 2.50

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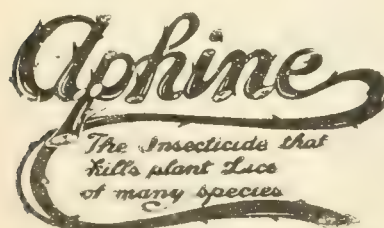
Franciscea. This is a very beautiful genus of the order Selanaceae. All its species are highly decorative, deliciously sweet, and can easily be brought into bloom at any season of the year. They are invaluable objects both for the conservatory and exhibition purposes. They are not grown these days as extensively as they had been, one rarely finds them even on private places, which is a thing to be regretted.

They are all evergreen shrubs, easily propagated by cuttings in sand in gentle bottom heat, with a bell-glass over them. To grow them successfully, they should be potted in a mixture of loam and leafmould with a liberal quantity of sand. After they have done flowering they should be directly shifted and placed in a temperature of 60°-65°, keeping them well watered and syringed. When the young shoots have made four or five leaves, the tops should be pinched off, continuing it until October, usually the time when the flowers commence to appear and when syringing must be reduced. If the plants are not wanted in bloom at this time they should be placed in a cold house at a temperature of 45°, and brought forward as desired. The most desirable species are calycina, calycina major, exima and latifolia.

Centradenia grandifolia. A very pretty and freeflowering plant, belonging to the order of Melastomaceae and is a native of Mexico. It has large oblong-ovate leaves, intensely green above and deep red beneath, the stem is quadrangular, and the flowers white, tinged with pink. It blooms throughout winter and spring without cessation, always producing such an abundance of bloom that the plants become very effective and useful. It is as useful and decorative for the ordinary house dwelling as for the conservatory. They are of very easy culture, readily propagated by cuttings in gentle bottom heat.

Coronilla glauca. This is a useful decorative shrub belonging to the natural order of Leguminosae, and is a native of France and Sicily. Its leaves are compound, leaflets obovate and of glaucous green color; flowers in umbels of seven or eight, of bright yellow color and very fragrant. It is an invaluable plant for the winter and spring decoration, well meriting a more prominent place in the floricultural world. It is readily propagated by cuttings of the young wood and requires the same cultural treatment as the Genista, which it resembles much in growth and in flower.

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New Peony Dahlia—John Wanamaker. Newest, Handsomest, Best. New color, new form and new habit of growth. Big stock of best cut-flower varieties. Send list of wants to PEACOCK DAHLIA FARMS, Berlin, N. J.

GOLD FISH
Gold fish, aquarium plants, snails, castles, globes, aquarium, fish goods, nets, etc., wholesale. FRANKLIN BARRETT, Breeder, 4815 D. St., Olney, Philadelphia, Pa. Large breeding pairs for sale. Send for price list.

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Lease or buy, pay cash, modern, few acres land, 58 Pine St., Swampscott, Mass.

INSECTICIDES
PERCO-BRAND INSECTICIDES.
A Standardized, Complete and Inexpensive Line. Ask for Prices.
PERFECTION CHEMICAL CO., INC.
151 H Washington St., Flushing, N. Y.

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Wood labels for nurserymen and florists. THE BENJAMIN CHASE CO., Derry Village, N. H.

ORCHIDS
HASSALL & CO., Orchid Growers and Raisers, Southgate, London, England. Cattleyas and Laelia-Cattleyas our specialty. One trial order solicited.

PEONIES
Peonies. The world's greatest collection. 1200 sorts. Send for list. C. BETSCHER, Canal Dover, O.

SPHAGNUM MOSS
Live Sphagnum Moss, orchid peat and orchid baskets always on hand. LAGER & HURRELL, Summit, N. J.

VINES
Flowering and Foliage Vines, choice collection. Large Specimen, Pot and Tub grown for immediate effect; also Climbing Roses. J. H. TROY, Mount Hissarlik Nursery, New Rochelle, N. Y.

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Inexpensive. Efficient.
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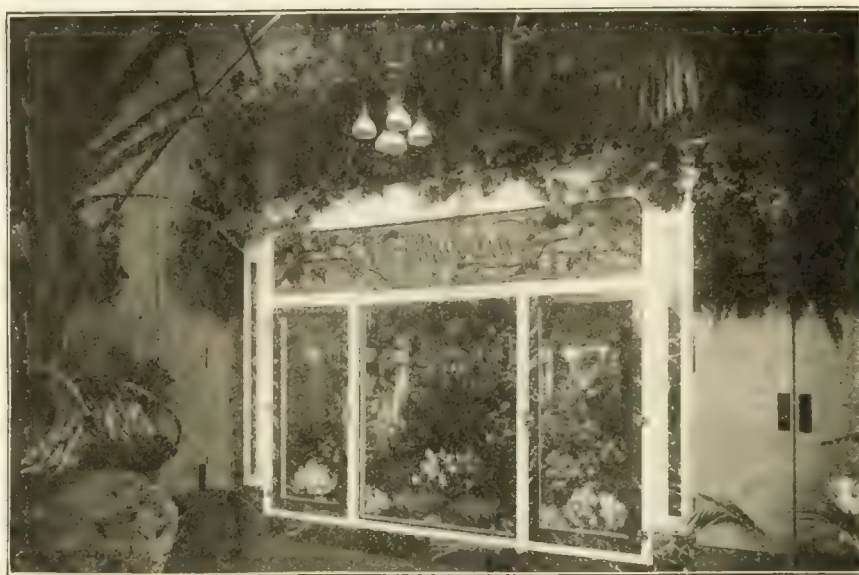
WIRE WORK
WILLIAM E. HEILSCHER'S WIRE WORKS, 264 Randolph St., Detroit, Mich.

HELP WANTED
Two apprentices to learn carnation growing. Apply to WILLIAM SIM, Clifton-dale, Mass.

WE ARE SPECIALISTS IN GREENHOUSE GLASS
Free from Bubbles
Uniform in Thickness
PAINTS and PUTTY
Greenhouse White (Semi-Paste) The Paint Particular Florists Prefer
It will pay you to get our estimates.
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For Sale by
HORTICULTURE PUBLISHING CO.

Chrysanthemum Manual. Elmer D Smith	\$0.50
The Chrysanthemum. Herring-ton .....	.50
Commercial Carnation Culture. Dick	1.50
Commercial Rose Culture. Holmes	1.50
Violet Culture. Galloway	1.50
Greenhouse Construction. Taft ..	1.50
Sweet Peas up to Date. Kerr ..	1.50
Plant Propagation, Greenhouse and Nursery Practice. Kains ..	1.50
Plant Pruning. Kains	1.50
Book of Garden Plans. Hamblin ..	3.00
Landscape Design. Hubbard ..	6.00
The Art of Outdoor Rose Growing. Thomas	6.00
The Home Vegetable Garden. Krumm	1.00
Vegetable Gardening. R. L. Watts	1.75
Parsons on The Rose	1.00
Principles of Floriculture. E. A. White	1.75
Foundations of American Grape Culture. Munson	3.00
Plant Materials of Decorative Gardening. Trelease	1.00
Aristocrats of the Garden. Wilson	5.00
Bailey's Cyclopedia of Horticulture, 6 volumes	36.00



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FOR KANSAS CITY

AND ALL POINTS WITHIN
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SAMUEL MURRAY

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HORTICULTURE

Vol. XXX

DECEMBER 27, 1919

No. 26

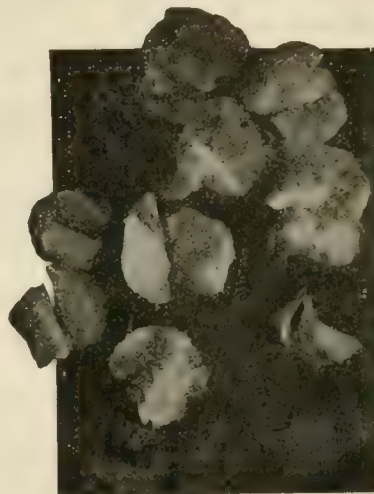
NEW ROSES FOR 1920

We shall offer for 1920 the three New Roses:—

PILGRIM CRUSADER
and
MRS. JOHN COOK

We want you to know them. May we send you full descriptions? Your request will bring it.

A. N. PIERSON, Inc.
CROMWELL, CONN.



NEW YEAR'S

Will find us in good shape on all Roses: Beauties, Hadley, Russell, Columbia, Premier, Ophelia, Pink and White Killarney, and Maryland.

SWEET PEAS are coming along in wonderful shape. Our growers will be in strong with very choice cuts for some time to come.

CATTLEYS, VALLEY and LILAC in good supply and good quality.

Everything in Cut Flowers, Plants, Greens, Ribbons and Supplies.

BUSINESS HOURS: 7 A. M. to 5 P. M.

S. S. PENNOCK COMPANY

The Wholesale Florists of Philadelphia

NEW YORK PHILADELPHIA BALTIMORE
117 W. 28th St. 1608-1620 Ludlow St. Franklin & St. Paul Sts.
WASHINGTON, 1216 H St., N. W.

FERNS

THE VICTORY FERN (*Nephrolepis victoria*)

We take pleasure in offering this new and valuable variety of *Nephrolepis*. It is a beautifully crested form of "Teddy, Jr." with fronds frequently subdivided on the ends, making a most unique, distinct, and desirable variety.

This fern was

AWARDED A BRONZE MEDAL

at the S. A. F. Convention at Detroit in August, 1919. The judges of the award reported as follows: "Special stress is laid on the new fern Victory, with a rapid growth and a branching at end of fronds, making it a shapely plant. It should be a commercial success, and we RECOMMEND IT MOST HIGHLY."

Strong plants, 2½-inch pots.....\$3.00 per dozen, \$20.00 per 100
Strong plants, 3½-inch pots..... 7.50 per dozen, 50.00 per 100
Extra fine specimens: 8-inch, \$3.00; 10-inch, \$5.00; 12-inch, \$7.50.

NEPHROLEPIS:	Each
Elegantissima, elegantissima compacta, 3½-inch.....	\$0.35
Elegantissima and elegantissima compacta, 6-inch.....	.75
Muscosa, 5-inch.....	.75
Elegantissima and elegantissima compacta, 8-inch.....	2.00
Elegantissima and elegantissima compacta, 10-inch.....	4.00
Harrisii, 8-inch.....	3.00
Dwarf, Boston, 8-inch.....	2.00

If plants are shipped in pots, 10% additional.

F. R. PIERSON, Tarrytown, N. Y.

FERNS

We have on hand for immediate shipment a splendid lot of Pot Grown Ferns all extra good value for the money. Shipped without pots

	Size	Doz.	100	1000
Bostons	4-in.	\$3.00	\$20.00	\$190.00
"	5-in.	4.50	35.00	325.00
"	6-in.	6.50	50.00	....
"	8-in.	18.00	....	....
Scottii	3-in.	1.00	8.00	75.00
"	4-in.	3.00	20.00	190.00
"	5-in.	4.50	35.00	325.00
Teddy, Jr.	5-in.	4.50	35.00	....
Cordetta Compacta.....	4-in.	3.00	20.00	....
"	5-in.	4.50	35.00	....
Crytonum (Holly Ferns).....	4-in.	3.00	20.00	....
Table Ferns, assorted.....	3-in.	1.00	6.00	....
"	4-in.	3.00	20.00	....

Alternantheras; Alyssum, double Giant and Dwarf; Begonias, Gracilis and Vernon; Hardy English Ivy; Lantanas, assorted; Heliotrope; Lobelia, Crystal Palace Gem; Moonvines, 2-in. \$2.75 per 100, 3-in. \$3.75 per 100.

Send for Catalogue Cash With Orders

R. Vincent, Jr., & Sons Co.
WHITE MARSH, MARYLAND

Henry H. Barrows

FERN SPECIALIST

Write for Prices.

H. H. BARROWS, Whitman, Mass.

CHARLES H. TOTTY

CHRYSANTHEMUMS MADISON, N. J.

Nephrolepis Norwood

Best Crested Fern

4 inch pots, extra heavy, \$35.00 per hundred; 6 inch, \$75.00 per hundred.

ROBERT CRAIG COMPANY, PHILADELPHIA, PA.

Snow Queen Canna

Awarded Certificate of Merit at S. A. F. & O. H. New York Convention. And 100 other notable kinds. Always ask for SWASTIKA BRAND CANNAS.

The CONARD & JONES CO. WEST GROVE PENN., U.S.A.

Robert Pyle, Pres. Antoine Winter, Vice-Pres.
We are subscribers to the Nurserymen's Fund for Market Development

SEND FOR OUR PRICES ON
Carnation Cuttings and Rose
Plants

C. U. LIGGIT
303 Bulletin Bldg. Philadelphia, Pa.

HILL'S EVERGREENS
BEST FOR OVER HALF A CENTURY
Small, medium and large sizes supplied
Price list now ready

The D. Hill Nursery Co.
Evergreen Specialists. Largest Growers
in America
BOX 415, DUNDEE, ILL.

THOMAS J. GREY COMPANY
SEEDS, BULBS AND IMPLEMENTS
WHOLESALE AND RETAIL
Reselected Strains in Seeds
Improved Styles in Implements
Catalogue upon Application
16 So. Market Street
BOSTON, MASS.

Burpee's Seeds
PHILADELPHIA

BLUE LIST OF WHOLESALE PRICES
MAILED ONLY TO THOSE WHO PLANT
FOR PROFIT

S. A. F. & O. H. Department

NATIONAL PUBLICITY CAMPAIGN

The florists throughout the land have, probably without exception, in the past few days been—to use a common expression, doing a “land office business.” The magazine advertising of our Publicity Campaign was timely for this season, and was calculated to arouse interest in flowers and plants as Christmas gifts.

A page carrying a beautiful group of flowers, painted from nature and reproduced in actual colors, appeared in World's Work, Munsey's, Review of Reviews, Scribner's, Atlantic Monthly, Century and Harper's. A well-arranged panel of text conveyed the message:

“For the Christmas and New Year Greetings let the heart speak through flowers. Radiantly lovely and alive with the holiday spirit, they convey every thought and sentiment with a sweetness surpassing mere words.”

In the Metropolitan for December was a whole page advertisement in colors, and located facing a solid page of editorial matter; the design, suggested by a famous illustration, including a beautiful girl of the Mary Pickford order, whose countenance gave unmistakable evidence of pleasure in the possession of gifts of flowers and plants. The text panel in this case suggested: “Say It with Flowers. The Gift of all Gifts. ‘Merry Christmas’ has a new and richer meaning when you say it with flowers. More gracious than words, more personal than material tokens, flowers convey your Christmas greeting with a sincerity that speaks to the heart. Courtesy, custom, correctness, and a nice sense of thoughtfulness are characteristic of the holiday wish expressed with flowers.”

In all the advertisements was the paragraph:

“Your local florist, within a few hours, can deliver fresh flowers in any city or town in the United States and Canada through the Florists' Telegraph Delivery Service.”

There is little room for doubt that this publicity has caused a greater demand for flowers and plants at this festive season than ever before. Before the war we always counted upon extra business at Christmas, but never such a volume as this year. Many days before this trade paper went to press with its issue of today plants-

Single and Double Hyacinths

Per 1000
Top Bulbs Named.....\$80.00
First Size Bedding to Color..... 45.00
Darwin Tulips, Named Sorts..... 25.50
Single Early Tulips, Named Sorts. 22.50
Single Late Tulips, Named Sorts. 17.50

Subject to Sale

J. M. THORBURN & CO.

53 Barclay Street
Through to 51 Park Place
NEW YORK CITY

KELWAY & SON

SPECIALIZE IN SEEDS

(personally selected strains)

WHOLESALE ONLY

Write for Special Prices, Spot or
Forward

Only Address, LANGPORT, Eng.

GIGANTEUM & HARDY LILLIES GLADIOLUS CANNAS AND OTHER SPRING BULBS

Write for prices

AMERICAN BULB CO.
172 N. Wabash Ave., Chicago, Ill.

E. W. FENGAR

CHRYSANTHEMUMS

147-187 Linden Ave.
IRVINGTON, N. J.

CHRYSANTHEMUM NOVELTIES for 1920

Preliminary list now ready.

Free by mail.

ELMER D. SMITH & CO.
Adrian, Mich.

men generally were entirely sold out of salable stock—evidence that the public intended to "Say it with Flowers."

Our Publicity Committee is in urgent need of more funds to carry along the campaign during the spring months. St. Valentine's Day and Mother's Day are to be featured very strongly in the magazine advertising, and contracts for space in the periodicals of large circulation must be quickly completed. It is hoped that the large body of florists who have not yet subscribed to the fund will see the desirability of helping themselves by helping the Campaign. The response made by the public to our slogan, "Say it with Flowers," is surprisingly large. Help us to make it larger, help us to perpetuate it. We can, with the help we believe to be owing to us, make the slogan more popular than any yet established—it means more and has greater applicability than any phrase ever adapted to trade purposes.

New Subscriptions.

The following subscriptions have been received and are in addition to those previously announced, annually for four years, unless otherwise stated:

For One Year

Florists' Telegraph Delivery Association, Buffalo, N. Y.	\$700.00
W. W. Bohn Floral Co., Wernersville, Pa.	5.00
E. W. Judge, Tyler, Tex.	10.00
J. A. Johnson, Effingham, Ill.	5.00
John A. Salzer, La Crosse, Wis.	25.00
Mrs. Lord's Flower Room, Topeka, Kans.	5.00
Anthony Ruzicka, Madison, N. J.	5.00
Coronado Nursery, Coronado, Cal.	5.00
Florists' Telegraph Delivery Association, Detroit, Mich.	2,000.00
E. B. Gallivan, Meridan, Conn.	2.00
	\$2,762.00
Previously reported	51,347.88
Total	\$54,109.88

JOHN YOUNG, Secy.

1170 Broadway, New York City.

JOKING THE FLORISTS

In a principal street of a country town there were two florists' shops and the rivalry between them was keen. They dealt in potted plants and cut flowers and abuse of each other.

Business was rather slack and White, whose shop was No. 21, thought to wake things up by offering a packet of seed, "guaranteed to grow" something, with each pot plant he sold.

He was quite pleased with the result until one morning he saw a new placard, large and bold, outside the shop of Black, his rival at No. 27. This read:

THE EARTH GIVEN AWAY
WITH EVERY
PLANT

BULBS, Etc.

JAP. LILIES—Giganteum, Auratum, Rubrum, Melpomene, Roseum, Album, Magnificum.

VALLEY PIPS—Forcing grade, Dutch or German.

T. R. BEGONIAS—Single, separate colors or mixed, 2 sizes.

Write for prices specifically stating requirements

McHUTCHISON & CO. THE IMPORT HOUSE

95 CHAMBERS STREET, NEW YORK

IBOLIUM

THE NEW HYBRID

HARDY PRIVET

(L. Ibota x Ovalfolium)



Ibolum Privet
Natural Habit



Ibolum Privet
When Trimmed

Now sent out for the first time. Inquire for further information. One year field grown plants; \$5.00 each; Summer rooted, frame grown, \$3.00 each; Plants in storage for immediate shipment. The Elm City Nursery Co., WOODMONT NURSERIES, INC., New Haven, Conn. Introducers of BOX-BARBERRY. well rooted summer frame cuttings—\$65.00 per 1000.

We are Headquarters for the BEST OF EVERYTHING
IN

VEGETABLE SEEDS

With our Stock Seed Farm at Grass Lake, Mich., and our growing stations in every part of the United States where seeds are grown successfully, all in charge of capable and experienced men, we are equipped for and are producing

PEAS, BEANS, CORN AND VEGETABLE SEEDS
of all kinds in quantity and of highest quality.

Glad to quote for present delivery or on growing contract for future delivery.

JEROME B. RICE SEED CO., Cambridge, N. Y.

"Seeds with a Lineage" All Varieties

Thoroughly tested at our trial grounds, Raynes Park, London, England. Send for Catalogue
CARTERS TESTED SEEDS, Inc. 166 Chamber of Commerce Bldg. Boston, Mass.

IF in need of RELIABLE NURSERY STOCK

that is well grown, well dug and well packed

Send to the **BAY STATE NURSERIES**

Wholesale and Retail

NORTH ABINGTON, MASS.

CANNAS

A large stock of several varieties. PRICES RIGHT. Let us book your order now for shipment at any time.

PARKER BROS. NURSERY CO.

FAYETTEVILLE

ARKANSAS

CARNATION CUTTINGS

Booking orders for December 15, and later. We are well prepared to supply in quantity and our growers have a high reputation for the quality of cuttings produced for years past. Have made special arrangements to supply **Laddie, Morning Glow** and **Pink Delight** from clean stock plants grown only for propagation purposes.

New and Scarce Carnations

	100	1000		100	1000
ETHEL FISHER (Peter Fisher), scarlet	\$14.00	\$115.00	MORNING GLOW	7.00	65.00
BERNICE (Howard), crimson.....	14.00	115.00	WHITE BENORA	7.00	65.00
RUTH BAUR	12.00	100.00	PINK DELIGHT	7.00	65.00
LADDIE	10.00	90.00	HERALD	7.00	60.00
			ROSALIA	7.00	60.00
			ENCHANTRESS SUPREME	7.00	60.00

Aviator, Belle Washburn, Doris, Benora, Rosette, Enchantress, White Enchantress, Beacon, Ward, Good Cheer, White Perfection, White Wonder, Miss Theo—\$6.00 per 100; \$50.00 per 1000. Matchless, Nancy and Alice—\$5.00 per 100; \$40.00 per 100.

GLADIOLUS BULBS

Brenchleyensis, Fire King, Independence, Klondike—\$30 per 1000. America, Augusta, Halley, Mrs. Francis King—\$35 per 1000. Delice (1¼)—\$35 per 1000. Chicago White—\$45 per 1000. Mrs. Frank Pendleton, Niagara, Peace—\$50 per 1000. Mrs. Watt (1¼)—\$50 per 1000. Baron Hulot, Panama—\$60 per 1000. Schwaben—\$70 per 1000. New Primulinus Miranda, large flowers, 3 to 4 flower spikes per bulb, canary yellow color, light carmine markings—\$40 per 1000. XXX Special Mixture—\$30 per 1000. First Grade Mixture—\$25 per 1000.

For profit buy Primulinus Hybrids. We have them in quantity and of best selection. Don't forget Primulinus Hybrids average two to three blooms per bulb and are quick sellers in the market. Fancy, \$35 per 1000; regular, \$20 per 1000.

All first size except where noted.

Cash or satisfactory trade references. No C. O. D. Shipments.

Let us quote you on **HARDY LILIES**—Auratum, Album, Magnificum. **DUE NOW.**

L. J. REUTER CO. *Plant Brokers* **15 Cedar St., WATERTOWN STA. BOSTON, MASS.**

IRIS SOCIETY TO BE ORGANIZED.

On January 29, 1920, in the Museum Building of the New York Botanical Garden an Iris Society will be organized. The organizers are Lee R. Bonnewitz, James Boyd, W. F. Christman, H. A. Gleason, Mrs. Francis King, B. Y. Morrison, Miss Grace Sturtevant and John C. Wister, all persons actively concerned in iris cultivation.

The meeting will be held at 11 a. m. The Garden is reached by Third Avenue Elevated to Bronx Park Station; by either Subway to 149th street and Third avenue, there transferring to the Elevated; or by the Harlem Division of the New York Central Railway to Bronx Park.

The purpose of the Iris Society is to promote in every way the culture and development of Iris. This may include the study of all known species and varieties; the compiling of a list of horticultural varieties, with their parentage, synonyms, names of originator, and date of introduction; the proper classification of these varieties; compilation of a history of Iris growing; cultural directions for different climates; a study of Iris diseases and pests; the establishment of test gardens and exhibition gardens in

various sections of the country; the organization of Iris exhibitions; and publicity through articles and bulletins, lantern slides, and lectures.

Persons who expect to be present at the organization meeting are invited to correspond with H. A. Gleason at the New York Botanical Garden in order that proper arrangement for their reception may be made.

NEW DAHLIA, J. HARRISON DICK.

The following appears in the current issue of the Bulletin of the American Dahlia Society:

A few years ago we lost by death our beloved secretary and fellow member of the American Dahlia Society. It was suggested that to perpetuate his memory any new seedling dahlia of 1918 brought into the New York exhibition and passed by the judges should receive the name of J. Harrison Dick.

Mrs. Charles H. Stout of Short Hills, N. J., introduced and exhibited a dahlia that received the judges' approval at the Dahlia Show in 1918. This dahlia was again exhibited by request of the judges at the New York show last September.

At a meeting of the Executive Committee in October, Mrs. Stout by let-

ter, donated the stock of roots to the society for propagation and sale. The proceeds from said sale to be for the benefit of the society.

President Vincent has kindly offered to propagate and distribute about May 15 plants of this dahlia at \$2.00 per plant. Mrs. Stout was among the first to order five plants for herself. Several other orders are already in and we will be pleased to book all orders as soon as possible. We hope to have a fairly good supply, but to be sure to obtain plants, send orders in early, as orders will be filled in rotation.

Mrs. Stout assures us that among some three hundred, this variety, J. Harrison Dick, beat them all by reaching a height of twelve feet, flowering profusely, of a shade of golden amber. We want every member possible to test this variety and report its merits to the secretary next season.

The judges who passed on this dahlia at the 1918 show were George H. Hale, Prof. George W. Fraser and James C. Clark. At the 1919 show the judges were Prof. George W. Fraser, James C. Clark and John S. Vincent.

The American Seed Trade Association will hold its next annual convention June 22 to 24, 1920, at the Hotel Pfister, Milwaukee.

HORTICULTURE

Vol. XXX

DECEMBER 20, 1919

No. 25

THE TALK OF THE TRADE

The first time I saw the new Chrysanthemum, Hamburg Late Pink, I couldn't help mention it in this column because it gives all promise of being a good one, particularly for after Thanksgiving and up to Christmas trade. Those of you who grew Maud Dean and afterwards Hamburg Late White, a sport of Maud Dean, will know what to expect of Hamburg Late Pink. The introducers claim that it flowers two weeks later than Maud Dean, and by taking a terminal bud after October 1st, most of the flowers will be cut from December 1st to January 15th. Stock propagated during March and April and kept growing will need no other particular culture, simply keeping them going along well and never letting the wood get hard. It is recommended that one flower be grown to the plant. No crown buds are taken, and I would say judging from the stock I have seen exhibited on two different occasions this variety will not be difficult for anyone to handle.

When I heard that Harold Ryan was growing the Gov. Herrick violet, I wanted to see how it was doing with

him and was pleased after I called at Mount Auburn the Sunday before Christmas to see such a fine showing. It is a great pity that this violet is not fragrant. It is much darker in color than the Princess of Wales, possibly not quite so long a stem, but with Mr. Ryan as well as at every other place where I have seen it growing, the all important point in its favor is productiveness. Mr. Ryan has part Gov. Herrick and part Princess of Wales in the same house, and the former was a mass of purple; blue hardly describes the color.

Those of us who remember Boston a number of years back and the wonderful standing it had as a market for novelties must miss very much some of the fine crops which were coming in at that time. The first crop I think of is Snapdragon. Possibly the absence of good snapdragon in the market at this time is due entirely to the rust and spot. I wish we could find some way to fight these diseases with some success. It would not be fair to say that no good stock is coming in, as one grower I think of in particular, Edward Winkler of Wake-

field, had some exceptionally fine stock.

Mr. Herr's article regarding Geranium stock such as cuttings, small plants and the finished plants and fair prices for these has been very interesting to me and I have been waiting for someone to start the ball rolling. Now I have decided to say something on the matter myself and while I am not coming very close to the price many of the commercial men will think necessary, I almost hope that I am far enough away so that I can induce them to criticize me freely. Then we may be able to get some real information.

I certainly agree with Mr. Herr that \$20 to \$30 per thousand for rooted cuttings will not send a man to jail for profiteering; in fact, I think \$20 per thousand if he persists at that rate might send him to a worse place, maybe the poor house. There are seasons of course when the average might safely be as low as \$20, but a season like the one just passed through makes it necessary for a much higher price. The loss of cuttings has been abnormal, and no matter how careful and expert the grower, a reasonable percentage was almost impossible. It is all right for one to figure how many cuttings may be taken from a plant, but the important point is how many may be potted up from the sand.

Now as to small plants, either 2, 2½ or 2½ inch makes no difference, I believe that \$65 per thousand is low enough. As to the 3, 3½ and 4 inch sizes, there is room for a lot of argument, and I would place a low figure at \$15 per hundred. They might bring more, but the buying public is going to get gun shy if they have to pay 35c. apiece for geraniums at retail, and if they wholesale over 15c. they will not retail for less than 25c. How much more the price will be will depend entirely upon the way the stock is handled. If express charges must be added and the loss from breakage and other troubles, then they will have to go above 25c. and we all know that there are so many other bedding plants that can be sold at the old prices that the geranium will suffer. Now I hope someone will come back and show me how far wrong I am



Good Snapdragons are Not Easy to Grow

Sam Goddard Talks on Carnations

It isn't often that S. J. Goddard of Framingham, Mass., known throughout the trade as one of the best carnation growers in the country can be induced to talk on his specialty. When he does say anything, however, he speaks to the point and accordingly a talk which he gave before the Hartford Florists' Club last week was listened to with the greatest interest and appreciation. Mr. Goddard emphasized several features about the growing of carnations as well as their after care and sale which should prove of no little value to members of the trade in general. For that reason, *Horticulture* takes great pleasure in publishing Mr. Goddard's paper in full. It is as follows:

Old-Time Varieties.

My recollection of the Carnation goes back to the days of Silver Spray, Ferdinand Mangold, Anna Webb, Mrs. Fisher, Grace Wilder, Tidal Wave, Florence, and others of that day, which we thought were wonderful varieties. Were they? I shall answer this question in due time.

In those days quality was not as essential to the commercial grower as now, it was quantity, he wanted, and pinching out the first flower for shorts (quite often this was a split flower) allowing the side buds to develop on it. It did not take many stems to make a bunch of fifty, nor long for a variety to make a record for number of blooms per sq. feet of bench space.

Mrs. Fisher was a grand variety for this style growing. As funeral work in winter depended on short white carnations which usually commanded a price of \$3.00, \$4.00, and often \$5.00 per hundred. I well remember a few years later when Daybreak Wm. Scott, and Hector came along, and with them disbudding, what fine flowers, and long stiff stems we got. I have seen Wm. Scott with stems fully 30 inches, which would be a credit to any grower to-day, and they brought as good prices as the present day varieties do in ordinary season.

It is interesting, and also entertaining to peruse a list of the older varieties such as America, Armizindy, Bon Ton, Bridesmaid, Gen. Macco, Boston Market, Harry Fenn, J. Manley and Eldorado, all varieties that were good commercially, returning profit to all. Then we are reminded of the other varieties which fell down after leaving their disseminator.

It is the failures as well as the successful ones that have made us so much more enthusiastic over the new

varieties that come over from time to time.

My belief is that the old varieties that I have mentioned were what we to-day call croppers, and all down the line the varieties have steadily advanced more and more toward the per-



S. J. GODDARD

petual blooming stage, which we are all watching and waiting for. I wonder what results one would have, could he to-day have Silver Spray, Hinz's White or Wm. Scott, with present day conditions, early planting and such like. I don't believe we have advanced so much on varieties as we have on cultural methods. Be that as it may, we have advanced tremendously in the science of growing, and of combating diseases.

What a lot of worry and anxiety we once had over rust, now this is seldom, if ever, thought of.

We have better houses which give us better light and ventilation, consequently, diseases are easier to control than they were in the old days of narrow houses, so I answer the question, "Were they wonderful varieties?" Yes, they were, and in 30 years we have not moved so very far.

Mrs. Thomas W. Lawson and Enchantress were the greatest advance in the first 10 years, and both these varieties are being grown to-day. Enchantress and its sports possibly are more widely grown, and are cultivated from one end of the country to the other. Mr. Peter Fisher must be a very contented and happy man; who would not be, if they, like him have the gratitude and respect of so many good people in our profession? The world

is better for having Peter Fisher, he has done a man's job.

From the Old to the New.

Enchantress is the connecting link between the past and present carnation. By the present I assume this refers to what are already standard varieties growing throughout the country, and disseminated within 10 years or so. Mrs. C. W. Ward has been on the market for 10 years now, and to date nothing has been produced to supplant it. Pink Delight and Beacon are about the same age and still running strong. Matchless will not be supplanted for some time, at least not in New England. We are just as much dissatisfied with the present day varieties as we were in the past with the then standard sorts. We shall never get the "Ideal Carnation." If it were possible to, there would be nothing more to do or to look forward to.

All the pleasures of anticipation would have no charms for the carnation grower. One of the greatest enjoyments one has, is waiting and watching for a new variety to bloom in the autumn for the first time. Pleasures beyond imagination abound for the enthusiast when handling new varieties, the flowers seem so slow in expanding, he watches day and night, wondering what the color, shape, and quantities are, that are contained within the calyx.

I have in mind the variety now named "Laddie." When I got it first it was under number. It grew so rank and sturdy I began to think that I had another splitter; bye and bye, it began to expand and show color. I was looking around that bench many times a day when at last out it appeared, and needless to say, I knew that the Dorners had a wonder that would create as great a sensation as did Lawson and Enchantress in their time. Producing carnations of the type and character of Laddie, Lawson and Enchantress are not every day, or every year occurrences, they are more like breaks of a decade, or of a generation, and we shall never be over-loaded with such good strains, they came at a time rather than in a series.

Is Improvement Possible?

We are always demanding something better than the existing varieties. It is natural to want something better, by these demands we nerve the disseminator, or the breeder to greater efforts and more careful selection as to, productiveness, health, and vigor of the carnation. We have not reached perfection in many ways—in color, form, size, and calyx. There is lots of room for improvement, but as regards the number of flowers per plant,

I thoroughly believe we shall never improve, for the reason that we cannot pick any earlier than we do now, nor can we extend the season in early summer. To get large plants we would have to extend the growing season, which is out of the question, as earlier propagation cannot be considered. I have heard of a variety producing as many as 21 blooms per plant in New England, but the average is not more than 14 per plant. If every variety would produce fourteen per square foot we should have no worries.

We can make the carnation as popular as we wish by proper cultural methods, proper handling, and shipping. We can grow varieties that are usually good keepers, and spoil them with an application of fertilizer that is entirely unsuited to them, or we can ruin them by improper ventilation. Now it is very important that we produce the finest of stock, if we are to keep the carnation in the class of popular flowers. We should endeavor to have the store man prepare suitable places to show and store them. I know there is much room for improvement in the majority of good florist stores. I believe there is in sight a much better race as regards keeping qualities, and the American Carnation Society is making every effort toward this end, going so far as to offer premiums for the best keepers at the exhibitions, taking into consideration the time packed, and in transit as a base toward making awards.

Keeping qualities are the most essential points in carnations of to-day. Color, size and form are only secondary. Of what use are they as cut flowers unless they last long enough to give joy and pleasure to milady over several days.

Color, Size and Fragrance.

We know good color is very important, also size, to a certain extent, and that fragrance is also considered essential, but how many customers buy for fragrance? I assume with confidence that the numbers are very, very small indeed, but they do ask for the kinds that keep best. Now let us growers go after the varieties that have these qualities, and then do our level best toward producing stock that will be a credit to the profession. We can do it. The carnation adapts itself to all soils, and it is only a question of a little study for a man to find out the treatment required by them in any particular soil or locality.

While I am speaking, I want to say a word for the American Carnation Society. The members are working for you all, doing their very utmost to improve the carnation in every way,

but it is a slow job and they want our help, your moral and financial support in their work. Come over and join them, the dues are very low, \$2.00 per year, and once you are a member attend some of the conventions and exhibitions. You will be better for it, you will be stronger for the carnation, and for the trade in general. Don't ask what shall I get out of it, for there is as much to be gotten out of it as you care to take away, or as much as you go after.

One of the chief causes for complaints against the carnation is in improper handling by the middle man, and the store man. One sees them laying around on the benches and counters, being handled by numerous prospective customers in a very careless manner, often very roughly, this should not be allowed, one doesn't handle roses, orchids or gardenias in such manner. Why? Simply because they

are considered more valuable, we must see to it that more respect is given carnations. In these times of high prices we must save every flower, deliver them to the storekeeper in the best possible condition, and he to the consumer, if we are to keep the carnation in the class of popular flowers.

VALUABLE ORCHIDS BURNED

A number of valuable orchid plants which were being sent in a small automobile delivery truck from the greenhouse at Beverly Farms of Albert C. Burrage to his residence at 314 Commonwealth avenue, Boston, were destroyed by fire when a charcoal heater in the rear of the truck tipped over and ignited the excelsior packing around the flowers. Frank Cadigan, the driver of the truck, extinguished the blaze with a blanket although an excited pedestrian summoned the apparatus.

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PLANTS

Cyclamen, \$1.50 and up; Begonias, 75c to \$2 each; Poinsettias, single, 50c, 75c and \$1 each; pans, made up with Ferns and Peppers, \$1.50 to \$4 each.

FERNS, Scottii, Verona, Boston and Roosevelt, 50c to \$2 each.

FRANK EDGAR,

Waverley, Mass.

HORTICULTURE

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Page and half page space, not consecutive, rates on application.

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Flower boostings

There are two ways of influencing public opinion. One is to make a big noise, loud claims and exaggerated statements, with the hope of impressing people by sheer force of oratory. The other is the more quiet way of keeping the subject always before the public but in such a subtle manner that it does not realize what changes are being made with thinking processes. All this applies to the flower propaganda. Which is the better way? Who shall say. For our own part, we think that the result is more satisfactory in the long run when the psychological effect is obtained by the less obvious methods. And so we find the following editorial in the Philadelphia Sunday Record, inspired we have reason to believe, by somebody of importance in the trade:

"After-dinner orators, and all glad-handers, particularly those whose positions impose upon them the necessity of reciting with oratorical fervor the catalogue of the glorious of this 'gr-rand old Commonwealth of Pennsylvania,' should take note of one of our industries which is usually overlooked. The scarcity and high prices of roses, a subject of much comment hereabout of late, most people believe to be merely a natural concomitant of war conditions. Other things are high, why not roses? But there is a special reason for the situation in the rose market. Philadelphia is the centre of the country's rose trade, at least east of the Mississippi. Even Florida, the 'land of flowers,' sends here for its supplies. And all the country in between, and north, west and east of us, looks to this city for 'American Beauties' and other varieties of the queen of flowers. Let our professional boosters and boasters remember that."

It will be noticed that the opportunity to boost Philadelphia as well as of flowers has not been lost sight of, but there can be no objection to that. It is a poor newspaperman who loses an opportunity to boom his own burg. At any rate, this sort of mention is a fine thing for the trade. It will be worth while for the florists in all cities to systematically cultivate the friendship of newspapermen and the favor of the papers. The Philadelphia Record in a second evidently inspired editorial has the following about roses:

"When your florist asks you \$3 for a single American Beauty rose with a 36-inch stem, blame it on Bancroft. When the historian returned to Washington from being Ambassador to Germany in 1875 he brought a plant of that rose with him. But he did not know for 15 years after what a prize he had in his garden. It took two Philadelphia florists, Edwin Lonsdale and John Burton, to demonstrate how this rose could be grown to wonderful perfection and become the foremost rose in the commercial cut-flower field, where it still reigns supreme after the lapse of 30 years. And so, dear lady, when you open that box of a dozen for Christmas, remember that they probably cost him a 'cool fifty' to express the full beauty, fragrance and strength of his affection. And so, dear man, blame Bancroft and Philadelphia for wishing on you this German atrocity to eat up your hard-earned dollars."

Co-operative advertising

English nurserymen and florists are trailing along after those of this country in the matter of co-operative action to further sales of their products. It has been shown by experience here that it pays to unite in some concerted movement properly directed than to undertake a lot of individual schemes here and there. It is like exploding one enormous shell rather than using weak rifle fire. The Britishers have taken a page from America's book and are giving much more attention than ever before to well planned co-operative advertising campaigns. The idea, however, is not only to increase the sale of flowers but to help the seedsmen and nurserymen in various ways.

For one thing, it is believed that garden making should be stimulated so that amateurs who began this work during the war will not give it up now. This may not appeal to market gardeners in this country, but probably would not displease the seedsmen. Many people who went in for garden making during the war because it was the fashion or indicated patriotism, will abandon their gardens now unless some effort is made to keep them interested. The National Nurserymen's Association of this country has the right idea in sending out free garden articles to hundreds of newspapers. There is reason to believe that these articles have been of no little value to nurserymen. They help to increase sales, but are not recognized as definite propaganda.

A writer in one of the English papers suggests the following paragraphs as indicating some of the lines which might be taken to increase the business among amateurs.

"Emphasize the benefit to personal health to be derived from gardening. Gardeners are notoriously the most long-lived of men.

"Point out how superior freshly cut vegetables are to the comparatively withered, dusty, much handled shop samples.

"Hammer home the real saving effected by growing one's own vegetables; instance prevailing prices.

"Give timely and helpful hints how to avoid the common as well as the particular errors.

"Induce the lay press to support the National Campaign by continuing their gardening articles.

"Educate the seed buying public against cheap foreign seeds.

"Deprecate seed saving in allotments and small gardens, such as is often thoughtlessly recommended in gardening articles, especially of such sorts as are liable to become cross fertilized with alien breeds."

Flowers Under Glass

Watch out for the orchid house at this season of the year when the weather is likely to be lowery and dull. If they get too damp you will pretty certainly have trouble. During bright weather, however, you can damp down two or three times a day. Do all your work such as changing and sponging the orchids on a bright day. Remember that orchids, like the cattleyas, miltonias, odontoglossums and laelias, require plenty of fresh air. Give them a little ventilation every day when possible, even though it be for only thirty or forty minutes. The orchid grower must know his individual plants in order to have the greatest success, especially at this season of the year, when one plant may require considerable more water than another. Of course no shade will be necessary for the next month or two.

It is time to begin propagating, which means that you will need an abundance of bottom heat. It often pays to board in the sides all around so as to get the heat close up to the bottom of the benches. Get everything cleaned by a thorough washing down and apply hot lime and white-wash to the sides and bottoms of the benches on the inside. There is no better way to prepare the benches than by placing coarse material on the bottom, perhaps an inch altogether, to make sure of proper drainage. Moss on top of this, and then three to five inches of clean sharp sand will give you an ideal propagating bench. After the sand has been put in and evenly spread, firm it in good shape and then give it a thorough watering. You can start in with your bedding plants any time from now on.

It is high time to be considering the lilies for Easter, and some of the space obtained by cleaning out holiday stock will make room for them. Fifty-five degrees is about the right temperature for Easter lilies for the next three or four weeks. Don't forget that a higher temperature is certain to result in making a soft growth. When the plants have made heavy root growth they can stand a little higher temperature. Giganteums and Multiflorums can be gradually increased to sixty-five at night.



FANCY & DAGGER FERNS

\$2.50 Per 1000

All Seasonable Cut Flowers Always on Hand. New Crop Bronze and Green Galaz Leaves.

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WHOLESALE FLORISTS

2 WINTHROP SQ. AND 34 OTIS ST.,
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This is a good time to begin making rose cuttings. Use wood which is not too old, and a knife sharp enough to make a smooth, even cut. Beauties and some other kinds are better with only two eyes. In fact, with Beauties especially best plants will come from cuttings that have two eyes only. It is a common mistake to have too much leaf with each cutting. The first two leaflets are enough unless they are pretty small, in which case half the next two may be allowed to remain also. Too much leaf surface increases the amount of work given the cutting to do. Moreover it crowds the propagating bench and gives an opportunity for black spot to set in.

When you make your cuttings, cut close to the eye but have the knife slant away from it. This does not mean making cuttings close enough to weaken the eye itself. When the wood has been cut, give it a good sprinkling, but avoid the plan of putting it in a tub of water, which used to be fol-

lowed not many years ago. Of course the cuttings must never be allowed even to wilt, as that would ruin them, but they can be kept in proper condition by repeated sprinklings. The right thing to do, though, is to get them in the sand as soon as possible with an abundance of bottom heat. It is all too common a mistake to first put in the cuttings and then put the heat on. This is wrong. Have the benches all ready before the work is begun. Then give a good watering daily, preferably in the morning, and take care to see that no water remains on the leaves at night, for there is nothing that will bring black spot quicker.

It is not too late to sow seed of Sweet Alyssum and winter flowering Forget-me-nots. Many florists grow them along the carnation benches and thus save space. Both these flowers will be found very useful for late winter work, and should never be overlooked by retail florists who do much of their own growing.

Carnation Morning Glow Has Been Sold in the Boston Market for 4 Years

It is there considered a bread and butter Carnation. **The Grower likes it**, because it is free and has no tricks. **The Seller likes it**, because it ships and keeps splendid—and what is best of all—

THE LADIES ADMIRE, AND ALWAYS BUY IT for its fresh, rosy color, just like morning glow. **Morning Glow** is early, free, has a good habit, fine stem and for blooming during the Summer, cannot be beat. While not one of the largest Carnations, it is considered

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Cuttings sold by the originator, \$7 per 100, \$65 per 1000
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to any of the firms whose address is
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Brockton, Mass.—Belmont Flower Shop.
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Beacon St.
Buffalo, N. Y.—S. A. Anderson, 440 Main
St.

Cambridge, Mass.—Harold A. Ryan.
Cleveland, O.—J. M. Gasser Co., Euclid
Ave.

Cleveland, O.—Adam Graham & Sons,
5523 Euclid Ave.

Cleveland, O.—Knoke Bros., 1834 W. 25th
St.

Cleveland, O.—The Smith & Fettes Co.,
735 Euclid Ave.

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Broadway.

Detroit, Mich.—J. Breitmeyer's Sons,
corner Broadway and Gratiot Ave.

Fall River, Mass.—Warburton, 495 New
Boston Rd. and 36 N. Main St.

Kansas City, Mo.—Samuel Murray, 1017
Grand Ave.

Lawrence, Mass.—A. H. Wagland.

Malden, Mass.—J. Walsh & Son.

New York—David Clarke's Sons, 2139-
2141 Broadway.

New York—Dards, N. E. corner 44th St.
and Madison Ave.

New York—G. E. M. Stumpp, 761 Fifth
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New York—Kottmiller, 426 Madison Ave.
and 49th St., also Vanderbilt Hotel.

New York—Max Schling, 785 5th Ave.

Omaha, Neb.—Hess & Swoboda, 1415
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Philadelphia—F. M. Ross, 136 So. 52nd
St., 13 So. 60th St., 212 E. Girard Ave.

Philadelphia—Chas. H. Grakelow, Broad
St. at Cumberland.

Providence, R. I.—Johnston Bros., 33
Dorrance St.

St. Louis, Mo.—Fred. C. Weber, 4326-28
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Tarrytown-on-Hudson, N. Y.—F. R. Pier-
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Taunton, Mass.—Hall the Florist.

Toronto, Can.—J. H. Dunlop, 8-10 West
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High Grade Cut Blooms**

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CONNECTICUT HORTICULTURAL SOCIETY

The annual meeting and election of officers for the ensuing year of the Connecticut Horticultural Society was held at 225 Trumbull street on Friday evening, December 12, with President George H. Hollister, presiding over the meeting as chairman.

The result of the election is as follows:

President, Warren C. Mason, superintendent of the Pope estate, Farmington.

First vice-president, H. R. Hurd, head gardener at the Vine Hill Farm, Elmwood.

Second vice-president, Frances Roulier, assistant superintendent of the James J. Goodwin Estate, Hartford.

Third vice-president, O. F. Gritzmacher, an amateur of no mean ability, New Britain.

Treasurer, W. W. Hunt, proprietor of the Blue Hills Nurseries, Hartford.

Secretary, Samuel H. Deming, assistant superintendent of Keney Park, one of Hartford's many beauty parks, Hartford.

Librarian, William T. Hall.

Botanist, John C. Willard of the firm of Comstock, Ferre & Co., Wethersfield.

Pomologist, George H. Hollister, superintendent of Keney Park, Hartford.

The next regular meeting will be held on January 9th, the second meeting of this month being omitted as it comes so near Christmas.

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Flowers

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Nothing Better

785 Fifth Avenue, New York City

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Will take good care of your orders

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8-10 West Adelaide St. - TORONTO, ONT.

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THE FINEST AND HARDEST LILY GROWN LILIUM REGALE

Acknowledged to be the finest horticultural introduction in several generations.

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**BOLGIANO'S 1919 SUMMER AND FALL
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Special Prices for
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Write for a copy at once—it will save you
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as well as a full line of Garden Seeds, will
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Write for our Illustrated Catalog

PLENTY OF COAL AT PIERSON'S.

The Experiment With Peat as Fuel
Given Up.

The fuel order of Mr. Garfield did not affect Cromwell's big flower garden under glass, the greenhouses of A. N. Pierson, the well known florist. Mr. Pierson said that the Cromwell plant has all the coal it will need. It takes anywhere from 10,000 to 15,000 tons to heat the greenhouses each winter, according to how cold the weather happens to be. Early last summer Mr. Pierson contracted for his winter's supply of coal on this basis, and now finds himself with a plentiful supply on hand.

The attempt to burn peat at the greenhouses has finally been abandoned. The plan was given a thorough trial, however. Mr. Pierson recalled his early days in Sweden when his father, who was a school teacher, used to go out and gather a variety of peat that gave a bright blazing fire that put forth much warmth. When the coal shortage became acute two winters ago Mr. Pierson made up his mind he could probably use peat to advantage in heating his greenhouses. He tried the experiment but it was not satisfactory. It was found upon analysis that the peat contained too great a percentage of slate to make it valuable as a fuel. Some experiments were tried with peat burners at the greenhouses, but it was decided not to install them finally and now the attempt to use peat as a fuel has been abandoned by Mr. Pierson.

It is said that if the peat bogs, which abound near the greenhouses, had contained a greater percentage of combustible material the experiment would probably have solved the fuel question at Cromwell for all time.—*Hartford, Conn., Times.*

MICHELL'S FLOWER SEEDS

ASPARAGUS Plumosus Nanus (Northern Greenhouse Grown.)

1000 seeds....\$3.50	10,000 seeds..\$30.00
5000 seeds....16.25	25,000 seeds..12.50

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1000 seeds....\$0.75	10,000 seeds..\$.50
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CENTAUREA

Candidissima, per 1000 seeds, 40c.	Oz.
Gymnocarpa, per 1000 seeds, 15c.	Tr.

LOBELIA

Crystal Palace Compacta...	Pkt.	Oz.
Barnard's Perpetual (Trailing).....	.25	1.75
Crystal Palace Speciosa.....	.20	.75
Sapphire (Trailing).....	.40	

	1/2 Tr.	Tr.
PETUNIA	Pkt.	Pkt.
Grandiflora fringed.....	\$0.30	\$0.50
Ruffled Giants.....	.30	.50
California Giants.....	.30	.50
Monstrosus (Michell's).....	.60	1.00

	Tr.	Oz.
SALVIA	Pkt.	Pkt.
America or Globe of Fire...	\$0.50	\$4.00
Bonfire.....	.40	2.50
Zurich.....	.50	4.00

VERBENAS

Mammoth Fancy Blue.....	\$0.30	\$1.25
" " Pink.....	.30	1.25
" " Scarlet.....	.30	1.25
" " Striped.....	.30	1.25
" " White.....	.30	1.25
" " Mixed.....	.30	1.00

VINCA

Alba.....	.15	.75
Alba Pura.....	.15	.75
Rosea.....	.15	.75
Mixed.....	.15	.60

Also All Other Seasonable Seeds, Bulbs and Supplies. Send for Our Handy Flower Seed Order Sheet if you haven't a copy.

HENRY F. MICHELL CO.
518 Market St., Philadelphia

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Practical instruction is offered in vegetable, flower and fruit gardening, greenhouse and nursery practice, together with lectures, laboratory, field and shop work in garden botany, zoology, pathology, landscape design, soils, plant chemistry and related subjects.

The curriculum is planned for the education of any persons who would become trained gardeners or fitted to be superintendents of estates or parks. Students may be admitted at any time. Circulars and other information will be mailed on application.

The New York Botanical Garden
Bronx Park NEW YORK CITY

HOLIDAY TRADE BIG.

Changing Tendencies Discussed by
Henry M. Robinson.

"It has been a record-breaking Christmas." So said Henry M. Robinson, of Boston, who is as familiar with trade conditions as any man in the country. "In spite of the high prices," continued Mr. Robinson, "people have bought freely."

"Have you noticed any changing tendencies this season?" was asked.

"Why, yes," was the reply. "Popular favor seems to have turned largely from wreaths to baskets filled with greens. In former years we sold from eighteen to twenty thousand wreaths of one kind or another. This year we have sold hardly more than half as many, but the difference has been more than made up by the call for baskets. With this demand for baskets has come a largely increased call for cones, which we brought by the barrel from Georgia. Never, I think, have so many cones been used. They are not dyed or silvered, but used in their natural state to decorate baskets."

Mr. Robinson is one of the most extensive dealers in artificial goods in the Eastern States, and has a reputation which reaches all over the country. It was interesting for that reason to get his view about the growing popularity of baskets in general.

"You must understand," said Mr. Robinson, "that before the war we got our baskets largely from Germany. Now, on the contrary, we make all our own. They cost more than the German product used to, but they are worth the difference and I doubt if German baskets ever have an extensive sale again in this market. There is no doubt about the favor in which baskets are held. This is true not only at Christmas time, but throughout the year. The popularity of the basket is likely to last a long time, too. At least that is the indication as I see it, and I am preparing for big sales to come."

"Another result of the war," remarked Mr. Robinson, turning to a huge pile of Cycas leaves, "is found in the fact that we now buy these leaves direct from Japan. In former years we got them from Germany in a prepared state. As we buy them from Japan now, they are in the natural state, having the color of straw, and

HOLIDAY DECORATIONS

Holly, XXX Quality Holly Wreaths
Mistletoe Cut Boxwood
Prince's Pine Japanese Roping
Laurel Wreathing Immortelles

RAFFIA—Fresh shipment just arrived

Write for Special Christmas Circular

SPRING BULBS—Gladiolus, Tuberoses, Caladiums. Ask for prices

Chicago **VAUGHAN'S SEED STORE** **New York**

THIS SEASON'S NEW ROSES

PILGRIM CRUSADER PREMIER RUSSELL HADLEY

We are receiving daily shipments of these new Roses, in large quantities, and can furnish same on short notice.

We have a large stock at all times of choice CARNATIONS, CHRYSANTHEMUMS, ORCHIDS, VALLEY and AMERICAN BEAUTIES.

Tel., Main 6267 **WELCH BROS. CO.** 262 DEVONSHIRE STREET
5948 BOSTON, MASS.

we prepare them ourselves."

There is no doubt about the quality of these Cycas leaves under the new arrangement. In appearance they are equal if not superior to the old German product. The number of Cycas leaves used in this country is enormous. Mr. Robinson's firm alone disposes of about three million every season.

According to Mr. Robinson there has been a largely increased demand for red roping, probably on account of a shortage in immortelles which come from France and have been high. Of course, too, a great amount of ruscus has been sold. The holly coming into Boston has been better in quality than that reaching some cities, apparently, and Mr. Robinson says he was able to get all he needed.

Altogether there was a great Christmas trade, with an especially large demand for greens and prepared foliage. It is not surprising that the holiday left the Robinson family in a pleasant frame of mind.

NEWPORT HORTICULTURAL SOCIETY.

The Newport, R. I., Horticultural Society has elected the following officers and committees for the ensuing year:

President—Arthur W. Potter, Jr.
First Vice-President—Andrew J. Dorward.
Second Vice-President—Charles W. Philpott.
Recording Secretary—Fred P. Webster.
Financial Secretary—William Gray.

Treasurer—Richard Gardner.
Sergeant-at-Arms—William F. Smith.

Executive Committee—The officers and Andrew S. Meikle, Bruce Butterton, John B. Urquhart, William MacKay, Frederick Carter, Alexander MacLellan, William F. Smith, James Robertson.

Auditing Committee—Herbert Bliss, Bruce Butterton, Andrew S. Meikle.

Entertainment Committee—Herbert Bliss, Andrew J. Dorward, Parker L. Thurston, Howard G. Ward, Robert Dunn.

DREER'S

FLORIST SPECIALTIES
New Brand New Style

'RIVERTON' HOSE

Furnished lengths up to 500 ft. without seam or joint.

The HOSE for the FLORIST

1/2-inch, per ft., 19 c.
Reel of 500 ft., " 18 3/4 c.
3 Reels, 1000 ft., " 18 c.
1/4-inch, " 16 c.
Reels, 500 ft., " 15 3/4 c.

Couplings furnished without charge

HENRY A. DREER
714-716 Chestnut St.
PHILADELPHIA, PA.



DESTROYED BY HAIL

Last Summer a florist who had imagined he was outside of the hail section lost upwards of 50,000 square feet of glass by hail with no insurance to recompense him.

He is now a member of the Florists' Hall Association of America.

Profit by experience and join the Association now. Address

JOHN G. ESLEB, Secretary
Saddle River New Jersey

RAMBLING OBSERVATIONS OF A ROVING GARDENER

I have been interested to find the popular magazines taking up the idea of winter gardens. It seems passing strange that so little attention has been given in the past, in this country at least, to the making of small gardens or the planning of large estates so that there would be an abundance of color throughout the winter months. There is no lack of material for use in this way and when properly employed it is most effective in robbing the landscape of the drab and dreary appearance by which it is too often characterized.

Of course the evergreens are of paramount importance. The list of those available for planting in New England and other northern states is not large, but fortunately it includes some splendid specimens, such as the native hemlock, *Abies concolor*, the Carolina hemlock, the common spruce, the white pine, and the splendid Japanese fir, *Abies homolepis* or *brachyphylla*. Of course these trees must be used with discretion, and are less available for small places than on large estates, but they can be made effective by proper planting.

Although quite different in character, and depending upon their bark for their beauty, white birches add much to the beauty of the winter landscape. It is unfortunate that many birches suffer greatly from attacks of borers, which pests have made the growing of the cut-leaf weeping birch difficult if not impossible.

Among the smaller plants which depend upon their bark for their winter beauty none are more valuable than several of the dogwoods, particularly *Cornus stolonifera* and its variety, *flaviramea*. The former has red stems while those of the latter are yellow. *Cornus sibirica* is another red twigged dogwood while *C. lutea* has yellow stems.

Then there comes the green stems of *Kerria japonica*, although it must be admitted that the general habit of *Kerria* is not as good as that of the dogwood, its growth being made in a straggling manner.

Some of the willows help, too, in giving a fine note of color to the grounds in winter, as anyone may observe by walking through the Arnold Arboretum at this season, when the willows are well worth studying. *Salix vitellina* has both golden and red barked varieties. Given a moist and

open situation and they impart a nice note of color. As with all willows the brightest colors come on the young wood, and when winter effects are desired care should be taken to give the trees a severe cutting back every spring.

Still another tree, the bark of which is highly attractive in winter as well as in summer, is the native beech, *Fagus americana*. This is a noble, symmetrical tree, the silvery gray trunk of which stands out particularly well against a mass of evergreens. The English beech, *F. silvatica*, is also attractive, but its bark is not quite so highly colored as that of its American cousin. This applies also to the weeping beech, *F. silvatica* var. *pendula*.

Another but much smaller tree which may be used to advantage, is the striped barked maple, *Acer striatum*, a native tree which is unique because of the fine white stripes running up and down through the wider shades of green, reminding one to some extent of the Shadbush.

Certain of the trees are always making an appeal to the eye, even though lacking in conspicuous and bright colored trunks or branches. One of these is the Gingko. The shape of its branches is unusual and its cork-like

bark is quite different from that of most trees. The Sweet Gum, *Liquidambar styraciflua*, is found with curious corky protuberances on its trunk and branches similar in character to those found on the common burning bush, *Euonymus alatus*, although not so pronounced.

Another tree which is interesting because of its corky bark is the *Phellodendron*.

It is unfortunate that the hawthorns have been neglected for several of them hold their fruit well into the winter and occasionally even until spring, making them among the most attractive of all plants for outdoor winter decoration. The hawthorn having the most persistent fruit is the common Washington Thorn, *Crataegus cordata*. Others which hold their fruits for a long time are *C. succulenta*, *C. nitida* and *C. pruinosa*.

The private gardener has a fine subject in the baby primrose, which is a splendid plant when well grown. It requires a dry atmosphere and plenty of ventilation when the weather is favorable for opening the ventilators. The roots of these plants should be watered only when moisture is absolutely necessary, for if they are kept too wet the plants will damp off. These plants should be grown in a house having a dry, warm atmosphere and a temperature of 50° to 55°. It will be worth while to give weak manure water occasionally.



Firs Add Much to the Beauty of the Landscape



The Meyer Florists' Green Thread is different from any other make. Every spool contains 2 ounces of actual thread, 16 ounces to a pound. See that you get the Meyer Florists' Green Thread and you will get the very best thread in the world. Don't take any substitutes.

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BOSTON, MASS. Mills at Lowell, Mass.

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WHOLESALE FLORIST

1619-21 Ranstead St., Philadelphia, Pa.

CHOICE BEAUTIES, ORCHIDS, VALLEY, ROSES
and all Seasonable Varieties of Cut Flowers

Wired Toothpicks

Manufactured by

W. J. COWEE, Berlin N. Y.

10,000....\$2.50 50,000....\$11.00 Sample free.
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24 Stone St., Rochester, N. Y.



Henry M. Robinson Co.

55-57 West 26th Street
and 430 Sixth Avenue

Telephone:
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GENERAL NEWS NOTES

In some of the western cities florists have been greatly handicapped by lack of fuel. The Pinehurst Floral Co., at Kansas City, Mo., has been obliged to burn wood and has had twenty men cutting and handling it. It is said that the expense of getting this fuel has averaged \$300.00 a day.

W. J. Pilcher has been appointed state vice-president of the S. A. F. for eastern Missouri.

The Missouri State Horticultural Society has elected L. T. Connott of St. Joseph, president.

The wholesale florists' trade in New York has been very much upset by the invasion of the furriers. Several meetings have been held of late to consider the situation. It is quite possible that a portion of the old Seigel-Cooper store on 6th avenue will be taken by the florists. The basement of the Coogan Building is being remodeled and three or four wholesalers will go there.

The Associated Retail Florists of New York have elected Geo. E. M. Stumpp, president.

Charles L. Atlee, long connected with the W. Atlee Burpee Co., at Philadelphia, has joined the John A. Salzer Seed Co., of La Crosse, Wis. He will be manager of the mail order division.

Edward J. Hass has become head gardener on the Bush estate near Newport recently purchased by J. Francis A. Clark.

A new greenhouse, 42 x 150 feet, has recently been built for Preisach Bros. at Leroy, N. Y.

NEW RETAIL STORE FOR WESTERLY

Munro, Incorporated, who recently took over the Reuter Greenhouses, at Westerly, R. I., has taken the store in the Welch block on Broad street, formerly occupied by Conrad Schultz, and will open a retail store there in charge of Miss Jessie Ahearn. The interior of the store has been remodelled. The Reuter plant operated by the same concern is being run by A. E. Ralston as manager. Twenty-six of the 31 greenhouses are now being operated, and the manager says that by spring all of the greenhouses will be yielding flowers for the trade.

HENTZ & NASH, Inc.

Wholesale Commission Florists

55 and 57 West 26th Street
Telephone No. 755 **NEW YORK**
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Wholesale Commission Florist
Choice Cut Flowers

New Address, 143 West 28th St., NEW YORK
Telephones: 2200, 2201, Madison Square.

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Telephone 5335, Farragut
Call and inspect the Best Establishment
in the Wholesale Flower District.

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CHOICE CUT FLOWERS

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Please mention Horticulture when writing.

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122 West 25th St., New York
Florists' Supplies

We manufacture all our
Metal Designs, Baskets, Wire Work & Novelties
and are dealers in
Decorative Glassware, Growers and
Florists' Requisites

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Fresh Cut Decorative Evergreens
Highest Standard of Quality. Largest
Stock in America. Write for Illustrated
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Brooklyn's Foremost and Best
WHOLESALE COMMISSION HOUSE
First Class Market for CUT FLOWERS
Willoughby St. Brooklyn

WE WANT MORE SHIPPERS

We have a numerous clientele of New York City buyers and the demand exceeds our supply. This is especially true of Roses. We have every facility and abundant means and best returns are assured for stock consigned to us.

Address Your Shipments to
UNITED CUT FLOWER CO., INC.
111 W. 28th St., New York
D. J. Pappas, Pres.

FRANK J. REYNOLDS CO.

Wholesale Florists

Boston Co-operative Flower Market
260 DEVONSHIRE STREET
BOSTON, MASS.

THE WEEK BEFORE CHRISTMAS IN WASHINGTON.

In spite of the thermometer being around the zero mark and flowers freezing, business kept up to standard. Prices were high—American Beauty roses from \$9.00 to \$18.00 per dozen; roses such as Mock, Richmond, Columbia, Premier, Russell, Killarney Queen, Killarney, Brilliant, Pink Killarney, Hoosier Beauty, Hadley, Ophelia are 25 to 75c. each; carnations are eight, ten and twelve cents; calendulas, \$4.00 and \$5.00 per hundred; poinsettias, \$35.00 to \$75.00 per hundred; Calla Lilies, \$3.00 and \$4.00 per dozen; sweet peas, \$5.00 and \$6.00 per hundred; Stevia, extra fine at \$4.00 per hundred.

There were quantities of blooming plants, but not enough to go around. Cyclamen sold from \$2.00 to \$4.00 at wholesale; poinsettia pans from \$2.00 to \$6.00 per pan, wholesale; begonias, \$1.50 to \$6.00 each; primroses, 50c. to \$1.00; araucarias, extra fine, at \$4.00 and \$5.00 each.

Gude Bros. Co. have been exceptionally busy the past week with some very fine dinners, weddings and debutante parties, as have many of the other florists around the city.

The feature of the week was "Say It with Flowers," sung by Vernon Stiles at Keith's Theatre. This was sung at matinee and in the evening. This was most effectively done by throwing flowers to the audience while singing "Say It with Flowers," and also having the ushers distribute flowers to the patrons of the theatre. Every day about a thousand flowers were used in this way, which was quite a drain on the Washington florists, but it was surely worth the price.

Gude Bros. are installing at the northeast plant under one of their large boilers a water grate culm-burning apparatus at a cost of nearly \$3,000 for one boiler. If this apparatus does what it is said to do it will save quite a good many thousand dollars per annum.

Mr. W. F. Gude is still serving the grand jury and was agreeably surprised at the adjournment on the Friday before Christmas when the jurors presented him with a magnificent token in the shape of a gold pen knife. This is very highly appreciated by Mr. Gude.

Recent visitors have been J. W. Grandy, Norfolk, Va.; Elliot W. Morris, manager W. J. Newton Co., Norfolk, Va.; Robert Pyle, West Grove, Pa.; Paul Berkowitz, Philadelphia, Pa.; J. W. Snyder and G. H. Gangerbaum, Cumberland, Md., and G. S. Gouldman, Fredericksburg, Va.

J. A. BUDLONG

184 North Wabash Avenue, CHICAGO

Wholesale Growers of Cut Flowers ROSES, CARNATIONS

AND ALL OTHER SEASONABLE STOCK

Shipping orders have most careful attention always

FUTTERMAN BROS.

Wholesale Florists, 102W. 28th St. New York

The Right People to Deal with. Phone Watkins 9761-159 Consignments solicited.

B. A. SNYDER CO. Wholesale Florists..

Hardy Cut Evergreens, Cut Flowers and Florists Supplies

21-25 Otis Street, BOSTON, MASS.

Telephone Fort Hill 1083-1084-1085

WILLIAM F. KASTING Co. Wholesale Florists

568-570 WASHINGTON STREET - BUFFALO, N. Y.

New England Florist Supply Co.

276 Devonshire Street,

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Telephones, Fort Hill, 3469 and 3135

Would like to handle consignments from growers of good Snapdragon and novelties.

HERMAN WEISS, Wholesale Florist

130 West 28th Street, New York City

The House for Quality and Service

ZECH & MANN

We are Wholesale Florists Doing a Strictly Wholesale Business

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MICHIGAN CUT FLOWER EXCHANGE, Inc.

WHOLESALE COMMISSION FLORISTS

Consignments Solicited

Hardy Fancy Fern Our Specialty

264 RANDOLPH ST., DETROIT, MICH.

Little Ads. That Bring Big Returns

Little Ads. in our Classified Buyers' Directory bring big returns to both advertiser. Anything wanted by florists, gardeners, park and cemetery superintendents, etc., can be sold through this medium.

Don't fail to read over these Ads. in each issue and you may find one or more that will prove profitable to you

THE BOILER OF Unequalled Fuel Economy

Kroeschell Boilers, the best by test since 1879. Forty years' experience.

THE QUALITY PLACE OF BOSTON

Regarding the Kroeschell, it is the best we have ever had and satisfactory beyond our expectations. It heats up especially quick and has saved us considerably already in the price of fuel. When we are in need of another boiler we will give the Kroeschell the first consideration.

(Signed) WM. W. EDGAR CO.,
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No Masonry—No Tubes



TUBELESS BOILER

Kroeschell Bros. Co., 466 W. Erie St.
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When You Buy—Get a Kroeschell

2,016,286 sq. ft. of glass was equipped with Kroeschell Boilers during the year of 1918.

OHIO'S CELEBRATED CYCLAMEN SPECIALIST

After using your No. 12 Kroeschell Boiler I came to the conclusion that had I to install more boilers it would be the Kroeschell and no other. It really is a pleasure to heat, no trouble to get the desired heat in a very short time.

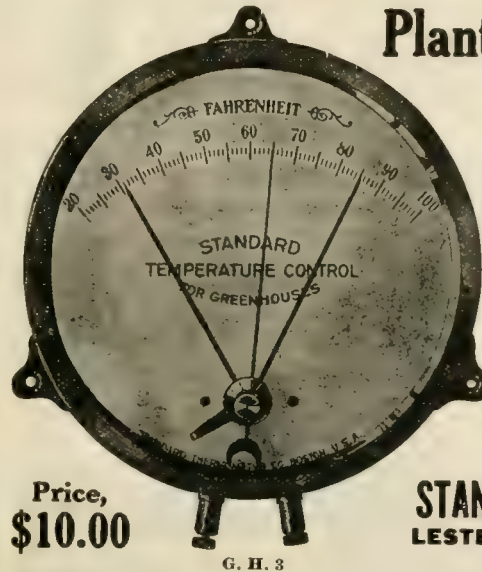
(Signed) CHRIST. WINTERICH,
DEFIANCE, OHIO.

PHILADELPHIA CHRISTMAS MARKET.

The Christmas tale has been told, and the story is that everything turned out just about as expected. Prices were so high that there was enough to go around. Roses in the better grades were plentiful enough to fill orders, but a scarcity felt in the shorts at lower prices. There is not the usual falling back on the lower priced flowers, such as carnations, for carnations were in shorter supply than last year and good flowers were bringing from ten to twenty with some fancies like Benora and Laddie as high as twenty-five. There was quite a scramble for good cattleyas and many lots of extras brought \$2.50 and \$3.00. In the plant world the stage was occupied mostly by the Cyclamen and Poinsettia for color, and palms and ferns for background. Our dear old friend the azalea was missed very much indeed and there did not seem to be many begonias around. Ericas were also less in evidence than usual. Taking it all in all—in the words of the music hall ditty—"The old gray mare, she aint what she used to be," and it will take a few years for us to get over what the Mad Kaizer handed us.

Mr. and Mrs. Frank M. Ross will start for Florida, January 3rd. They expect to be gone three weeks on a well-earned vacation. Their headquarters will be at the Hotel Flagler, Palm Beach.

Emil Hertz, Copenhagen, Denmark, a noted seed grower, gave this office a pleasant call on the 18th inst. He has been in this country about six weeks and has covered it as far as the Pacific Coast in the interest of his business. He leaves for home on an early steamer—much impressed from his first visit to Uncle Sam's domains. His specialty is vegetable seeds, but he is also near the top on such items as Danish grown Cocksfoot and Vetches.



Price,
\$10.00

G. H. 3

Plant Insurance at \$10

WHAT would happen if your night man fell asleep some night in zero weather? What if you should oversleep, or a cold wave hit your greenhouse when your heat is at the minimum? It would mean ruin to your plants—possibly ruin to you. There have been many such cases.

But not if you are equipped with the STANDARD THERMOSTAT. The Standard Thermostat protects you from just such dangers. It will ring a bell at your bedside when danger is near.

"I have one of your greenhouse thermostats I have used 3 years. It has proved so satisfactory I want another for my new houses."—John Sharper, Oxon Hill, Md., Jan. 6, 1919.

Get one today, \$10.00

(G. H. 4, same as G. H. 3, only under lock and key, \$15.00.)

STANDARD THERMOMETER CO.
LESTER STREET BOSTON, MASS.

THE BOSTON MARKET.

It has been a week of high prices and short offerings in most lines. At times there has been a frank standoff between the wholesalers and the retailers, but the great demand and the lack of first class material has forced the flowers to move. White carnations and white roses have been in abundance. They are never particularly popular at Christmas, but in some cases buyers have had to take them to get colored flowers. White "mums" sell readily at this season and what were offered were taken up quickly. Carnations have sold all the way from six to twenty cents. Hadley seems to have been the best selling rose. When

the Christmas selling was over nothing was left in the flower line except some inferior stock. Greens at the flower market were cleaned out well, but a great many were left in the public markets. One man said on Wednesday morning that he had two cars of trees which had not been unloaded.

IN NEW YORK.

New York has seen a very lively market, with a scarcity of high class stock, especially in the line of carnations and roses. The former have sold up to twenty-five cents and there have not been enough to go around. From present indications the demand will continue good until after New Year.

LILY BULBS FROM STORAGE

GIGANTEUM, RUBRUM, ALBUM, AURATUM
MELPOMENE, LILY OF THE VALLEY

Careful storage, prompt express shipment
on dates as arranged

Gladiolus Bulbs

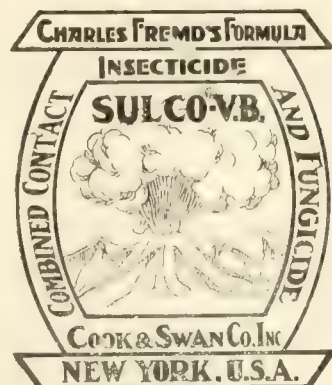
For Early Forcing
Of Finest Size and Blooming Quality

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IN LINE FOR FALL SPRAYING IN NEW ENGLAND



SAN JOSE SCALE
OYSTER SHELL SCALE
BAY TREE AND PALM SCALE
SCURFY BARK LOUSE
PEAR PSYLLA
CLUSTERS OF APHIS EGGS
HANG OVER FUNGUS SPORES OF THE
BROWN ROT OF THE PEACH AND
OTHER STONE FRUITS.
PEACH LEAF CURL
APPLE CANKER AND SCAB

Destroy the above named insects and fungus spores by spraying them with

SULCO-V.B.

A combined contact insecticide and fungicide of known reliability

Simple, Sure and Safe — Right in Principle and Price

From your dealer or direct—go to your dealer first

Address COOK & SWAN CO. Inc.

148 Front Street
NEW YORK CITY

141 Milk Street
BOSTON, MASS.
Geo. H. Frazier, Mgr.

NEWER VARIETIES OF DAHLIAS.

By Richard Vincent, Jr.

Among the most attractive dahlias we had growing the past year, that is the varieties that attracted the attention of all flower lovers who visited our trial fields and grounds, I have named the leaders:

Mina Burgle, Dr. Tevis, Hortulanus Flet, Futurity, King of the Autumn, Dream, Beloit, Alabaster, Geisha, Kalif.

There are a number of other varieties that are really good commercially and so are the majority of this list, but they are particularly suited to the small grower.

Procure plants of these varieties the last of May or the first of June, head down the first growth so as to form a good growth at the base of the plant, then you can rest assured that if soil and other conditions are looked after, a quantity of fine blooms will reward the grower.

One particular strong and vigorous grower is Futurity. It seems both disease and weather proof. It is a Holland production, a deep pink in color. Its parentage we do not know, but it is apparently of some kin to King of Autumn and Dream, both good ones.

Hortulanus Flet is also a Holland production of sterling merit. Mina Burgle is a California production, the best of reds for the garden. A lot of others are really good; in fact there are many others to select from.—*Bulletin of the American Dahlia Society.*

PRES. FISHER RESIGNS.

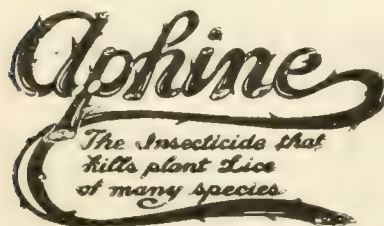
The regular monthly meeting of the North Shore Horticultural Society was held Friday, December 5th, President William E. Fisher in the chair. Mr. Fisher who is leaving the Cyrus H. McCormick Estate and going East, gave in his resignation with regrets as president after being elected for 1920. The society voted in E. Bollinger to act in that capacity for 1920.

Mr. Wm. C. Rickards of Hunt & Co., New York was in attendance and gave a short talk on "Chrysanthemums at the Eastern Exhibitions." He also gave the Society \$10.00 for the best strawberries exhibited at the Spring Show.

J. R. CLARKE, Cor. Secy.

The Baxter Floral Co. has been incorporated at Baxter Springs, Kans. A. H. Sweigert and A. L. Harvey are the directors.

T. O'Connor of Providence, has increased his delivery service by means of a handsome Dodge truck.



The Recognized Standard Insecticide.
A spray remedy for green, black, white fly, thrips and soft scale.
Quart, \$1.00; Gallon, \$2.50.

FUNGINE

For mildew, rust and other blights affecting flowers, fruits and vegetables.
Quart, \$1.00; Gallon, \$2.50.

VERMINE

For ear worms, angle worms and other worms working in the soil.
Quarts, \$1.00; Gallon, \$3.00.

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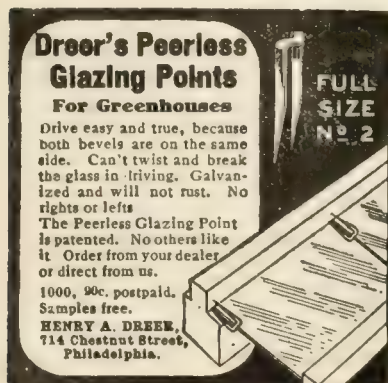
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